



Behold A Prince Renowned In Peace and Arms. | The British glory and Great Britains Joy.  
 whose name and Fame the world with wonder charms. | who saved the Dear Palladium of our Troy.  
P. A. Boscawen scul.



Behold A Prince Renowned In Peace and Arms. | The British glory and Great Britains Joy.  
 whose name and Fame the world with wonder charms. | who saved the Dear Palladium of our Troy.  
P. A. Boscawen scul.



The Perfection of  
**Military Discipline**  
After the Newest Method,  
As Practised  
In England and Ireland, &c.

O R,  
The Industrious SOULDIER'S *Golden*  
*Treasury* of Knowledge in the Art of making WAR.

CONTAINING,  
Instructions for the Exercising the Pike and Musket  
in all their Postures, with the Signs of the Drum, by  
its beating the several Points of War, the Exercise  
of Granadeers, Horse, and Dragoons: The Explanation  
of the Words of Command, and how to be put in  
Practice: The manner of drawing up in several  
forms of Battle: The various Fireings and Advan-  
tages to be gained thereby: The several Doublings,  
Wheelings, and drawing up of Battalions, Squa-  
drons of Horse, &c. with the conduct of Armies in  
open or inclosed Countries, or upon any occasion or  
Immergency: How the detached Party and Officers,  
&c. ought to carry themselves; several ways off of  
Incampment, opening difficult Passes, taking Ca-  
stles, passing bridges, opposing Towns, or For-  
tresses. The Method to be observed in Garrisons,  
and the manner of Fortification, with that of be-  
sieging strong Holds, &c.

*To which is added, as a Second Part.*  
*The Art of Gunnery, or the Compleat Engineer, shewing*  
*the Practice of the Ordnance, Mortars, &c. with the*  
*manner of making and using Fire-works for War, at*  
*Sea and Land, and many other things necessary to*  
*be known for the Improvement of Souldiers.*

---

*London: Printed for Nicholas Boddington, at the*  
*Golden Ball in Duck-Lane, 1690.*

Lisenced according to Order.

Octob. 12.  
1689.

---

# THE P R E F A C E.

**T**HE Profession of Arms has in all Ages been in such Esteem, that the Great Men of the World have made it their Study; Emperours and Kings have preferred the Name of a Souldier above the rest of their Glorious Titles, and indeed, the Sword is properly the Bullwark of a Kingdom, without which the Laws would prove weak and ineffectual; for did not the Violaters fear that Power, which is of force to compel them to undergoe the Penalties of the Laws, they would esteem them but a dead Letter: And to speak more plain, The Souldier is the Guard of Liberty, Property, and what ever is dear to Mankind, as being at all times ready to sacrifice his Life for the Defence of his Country; nor are the Advantages small that may incite men to the study of the Military Art, for it is often seen, that Persons of mean Birth

A 2

and

## THE PREFACE.

*and Fortune, have by their Courage and Industry become great Commanders ; and many times Generals of Armies : Courage indeed, is a great Qualification in the profession of Arms, but without Experience it frequently does hurt, and rarely raises a man to any considerable Station ; but joyned with Experience, and kept within bounds, it wants but Opportunity to make him Eminent, though many Books of this kind have appeared in the World, yet, being either of an extraordinary Price, or wanting somewhat new, and necessary to be known, we thought fit, especially for the Instruction of young Souldiers, to compile in a small Volume such a Body of Military Disciplin'd, &c. as at this time is Practical, and approved by the great Captains of the Age, that they may be able to understand their Duty, and perform it with Exactness and Dexterity ; so that being well grounded in the most necessary and honourable Art, their Courage, Zeal, and Loyalty, may not only frustrate the Projects of our Enemies abroad, and at home, but render these Kingdoms Dreadful to our Neighbours, and Happy in themselves.*

The Perfection of  
**MILITARY DISCIPLINE**

After the Newest Method,

As Practised

In England and Ireland, &c.

**T**HE most promising things to Preferment in this great Art, are Valour and Obedience, for it is not only very commendable when occasion offers to fight Valiantly, but likewise to obey Patiently, the latter being looked upon as a great Vertue; to these Experience acquired by Labour, and Industry being joyned, Difficulties will the easier be overcome; a man may indeed, a long time bare Arms, and yet be ignorant in many things he ought materially to know; but an Industrious Mind will accomplish much in a short time.

There are several things in the *Military Art* to be considered, and in the first place, those properly called the Senses, by which we receive Advertisment, as the Eye and



the Ear; and in this case a strict Observance, and Silence is required, that the one and the other may not be mistaken. The Signes used in War, are commonly three, *viz. The Voice which conveys the word of Command to the Ear. The Trumpet or Drum which by certain Sounds and Beats give notice to the Cavalry and Infantry what is to be done. And the last is, The Hand Colours, or other Lights which inform the Eye;* and these are called *Vocal Semi-vocal and Mute*, and these must be perfectly understood, or else by mistake, or not knowing what to do, a Souldier may run into great Error, especially in Battle, loosing himself, and being the occasion of the loss others: But of this more hereafter.

When it happens that a Regiment has the word of Command to draw out, then ought the Major, or Adjutant, to Assign each Company its proper Post, and this must be done by placing the eldest Company upon the Right, and the next to that on the Left, and so in order to the youngest, who by this meanes will come into the Center, and every Company or Body of Men are to be drawn up in the beginning at the same order they march at, as well in Rank, as File, the single Companies always taking notice to leave so much room as the Serjeants and Drums may place themselves in, on the Right and Left of each Company: Then observe before you  
form

form your Battalions, to draw up from every Company the odd Men, forming in Opposition a Rank at fifty paces in distance from the head of each Company, that no broken Files may appear; and by this means with more speed and dexterity you may compleat the Files.

The Battalions may be form'd, the Companies disposed in order as aforesaid by these words of Command, viz. 1. Have a care to form the Battalion. 2. Musqueteers, to the Right and Left outwards. 3. Pikes, to the Right and Left inwards. 4. March interchanging Ground. Upon the interchange of Ground by the Pikes and Musqueteers; the first Rank of Pikes must pass before the first Rank of Musqueteers: And it ever is to be noted, That after Command for moving of any kind, no man stir till the word March be uttered, so that they may move joyntly, and not break the Order.

The Ground being changed, the Souldiers must forbear to face to their Leaders till they be so commanded, which done, they are in Battalia at close Order in File; and the Officers in this case must have a regard to the whole, as not limited to their particular Companies, and the Commandant must take notice how many Serjeants are present, and if the Battalian contain eight or ten Companies, or a bigger number, and every Company two

Serjeants, and three Corporals designed to do the duty of Serjeants, two must necessarily be placed on each Rank, to the Right and Left, and the others must have their Stations in the Rear ; but if the Serjeants be not so many, then there will be allowed but one to each Rank, to the Right and Left, and the rest in the Rear, making a Parallel Rank to the Souldiers, keeping three paces distance from the Rank.

The Serjeants thus placed, the Drums must stand one half on the Right, and the other half on the Left, that they may range directly with the first Rank of the Souldiers ; but if the Drums be more than usual, and the ground be streight, then they may be disposed in two Ranks, on the Right and Left, ranging with the two first Ranks of Souldiers ever slinging their Drums, unless contrary Command be given. The *Hoisboys*, if there be any, are to take the right of the Drums which are on the right of the Battalion ranging with them in the same Ranks.

The Commission Officers, according to the *English* Military Discipline, are to take their places at the head of the Battalion, as the Colours are drawn ; but more of this hereafter. In this close Order, the Ranks, by the care of the Serjeants, are to have twelve large Feet distance between Rank and Rank, which must be kept very even, the  
Chief

Chief Commandant to place himself about forty paces distant from the Center of the Pikes.

As to the words of Command, they must be given with deliberation, least commanding too fast put the Souldiers beside their Exercise ; Silence being commanded, the next word of Command is,

Files, open to the Right ( or to the Left ) to your Order. March.

At these words each Souldier turns to the hand mentioned, and after a short stand the Flanking Searjeants lead the Ranks (which by this means are Files) marching slowly forward by short steps ; the Serjeants with advanced Halberts, the Iron uppermost : every man, if they move to the Right, observing the left-hand man, if to the Left, the contrary, and as soon as the last man but one of the first Rank stirs, the Command is to be given for them all to *Halt*. And in proceeding to open Files after this manner, no man ought to move till his Leader be at four foot distance, and then to move with equal pace and keep the distance, so that when faced to the proper Front, there will be three foot space between them : The word of Command to *Halt* being given ; the word of Command succeeding is,

To your Leader.

In

In this case the Captains and Lieutenants are to carry their Pikes comported ever when they move to the Right, or Left; the Ensigns being Advanced, the Ranks must also be kept even at twelve feet distance, which is the Serjeants Care, the Files must be likewise at three feet distance, each having regard to his right and left-hand man.

To draw the Officers from the Front of the Battalion to the Rear; these words must be used, *viz.*

Have a care of the Exercise.

Upon this the Musqueteers are to draw off their right-hand Gloves; and stick them in their Girdles. The next words are, *viz.*

Officers take your Posts of Exercise in the Rear. March.

Upon this the Officers must face to the right-about, the Captains marching a pretty swift pace in the one Rank, and the Lieutenants and Colours in another, two paces behind; Captains and Lieutenants, carrying their Pikes Advanced; being in the Rear, the Lieutenants and Ensigns are to take their places in a Rank about twelve feet from the Serjeants; the Captains ought to be thirteen paces from the last Rank of Souldiers, and the Lieutenants and Colours eleven; and at this word of Command, or further signal from the Officers to take their Posts of Exercise in the Rear, six Serjeants of the Rear must



must march thorough the Intervals of the Files, posting themselves in the Front forty six paces from the first Rank of Souldiers, being advanced six paces before the Chief Commandant, making by their ranging, a parallel Line with the Battalion, keeping the Front free, and undisordered. This word being likewise given, the Pike men must joyn their left-hands with their Pikes, placing them even with their Shoulder.

We suppose the Musqueteers to have Shouldered, and the Pikes Advanced, none are to speak after Silence is Commanded, but the Officer in Chief who thus proceeds,

1. Order your Pikes. 2. To the Right, to the Right, to the Right, to the Right, to the Right-about, as you were; To the Left, to the Left, to the Left, to the Left, to the Left-about, as you were.

*Words of Command for the Exercise of  
the Fire-Lock and Pike.*

1. **M**usqueteers, have a care of the Exercise, and carry your Arms well.
2. Lay your right hands on your Muskets.
3. Poise your Muskets. 4. Rest your Muskets.
5. Cock your Muskets. 6. Guard your

your Musket. 7. Present. 8. Fire. 9.  
 Recover your Arms. 10. Half bend your  
 Muskets. 11. Clean your Pans. 12. Handle  
 your Primers. 13. Prime. 14. Shut your  
 Pans. 15. Blow off your loose Coyns. 16.  
 Cast about to Charge. 17. Handle your  
 Chargers. 18. Open them with your Tether.  
 19. Charge with Powder. 20. Draw forth  
 your Scowerers. 21. Shorten them to an  
 Inch. 22. Charge with Bullet. 23. Ram  
 down Powder and Ball. 24. Withdraw  
 your Scowerers. 25. Shorten them to a  
 Handfull. 26. Return your Scowerers. 27.  
 Poile your Muskets. 28. Shoulder your  
 Muskets. 29. Order your Musket. 30.  
 Pike-men, take heed. 31. Advance your  
 Pikes, to the Front, Charge. 32. To the  
 Right, Charge. 33. To the Right, Charge.  
 34. To the Right, Charge. 35. To the  
 Right, Charge. 36. To the Right-about,  
 Charge. 37. As you were, Charge. 38.  
 To the Left, Charge. 39. To the Left,  
 Charge. 40. To the Left, Charge. 41.  
 To the Left, Charge. 42. To the Left-  
 about, Charge. 43. As you were, Charge.  
 44. Advance your Pikes. 45. Shoulder your  
 Pikes. 46. Charge to the Front, 47. As  
 you were, Charge to the Right, as you were.  
 48. Charge to the Right-about. 49. As you  
 were, Charge to the Left, as you were. 50.  
 Charge to the Left-about. 51. As you were.  
 52. Port.

52. Post. 53. Comport. 54. Charge to the Front. 55. Trail your Pike. 56. Charge as you were. 57. Advance your Pikes.

When you Exercise thus, it must be done altogether, and not one after another, that a whole Battalion may seem to do but one and the same Action. Then to proceed further, viz. Musquetærs take heed. Poise your Muskets. Shoulder your Muskets. Musquetærs, make Ready; at which time all the Postures of the Musket are to be performed by the Musquetærs together, which readiness imployes a Cocking, which must be guarded with the Thumb, least it should go off unseasonably, and the Muskets brought streight before them, with the left hands a little above the Chin. The Pike-men at the word, Make Ready, are likewise to bear their Pikes straight before them, and recover their left hands the height of their Ears, both of them observing when they come to this Posture, to recover their Arms before them, that they bring their right Heels to their left Insteps; and when the Pikes Charge, and the Musquetærs rest, to retire, or fall back with the right Feet in a direct Line, observing in all Chargings, or Motions of the Pikes or Muskets, to take care that they clatter not one against another.

*An Explanation of the Words of Command or Postures, in Exercising the Fire-Lock, Musket, and how they must be performed.*

**W**hen you enter upon Exercise, whether it be of Pike or Musket. you must observe to keep your Feet at a moderate distance, that you may upon occasion retain your full Force and Strength, ever keeping the left Heel firm, and set the right Feet : But as to the Exercise.

1. Lay your right Hand on your Musket.

In this Action the Lock being uppermost, turn your Barrel towards you, and your Fingers being extended, lay your right Hand just behind the Lock, then close the butt end of your Musket to your Shoulder, so that it may in all parts be of an equal height.

2. Poise your Musket.

Here you must hold your Musket with a hard grasp, facing to the Right, and turning with a quick motion upon your left Heel, keeping your Musket exactly before you, the height of it between your Shoulders, your right Elbow on your side, and your Feet at a moderate distance, that turning about, the point of your left Toe may be to the Front, and that of your right, as you face to the left Heel,

Heel, being directly against the middle of your right Foot ; and so are you in a resting Posture, &c.

3. Rest your Musket.

In performing this, let your Musket slide, or sink down to your left hand, letting down your Arm as low as possible, without stooping, receiving the Musket directly where the Scowerer enters into the Stock, suffering your hand to touch no part of the Barrel ; let it be a little stooping from perpendicular about half a foot from your side, keeping your right hand with your fingers extended behind the Lock.

4. Cock your Musket.

In this doing, place the Thumb of your right Hand and your Finger behind the Trigger, and clapping it against your Thigh ; Cock, keeping for the better security your Thumb upon the Cock.

5. Guard your Musket.

In Guarding your Musket, bring it in the foregoing Posture with a very quick motion straight before you to the Recover, your left hand equal with your Mouth but about half a foot distance, not stooping, nor suffering your Musket to sink, observing in bringing up the Musket, before which is a Recovering, to make the right Heel come to the left Instep, keeping your Musket right perpendicular.



## 6. Present.

In this case, fall back with your right Leg, so that the left Heel be against the middle of the right Foot, suffering the butt end to rise to you Shoulder, setting it fast, your right Elbow even with the height of the Piece, being ever ready to pull the Trigger with the fourth Finger of your right Hand, bending the left Knee a little, and keeping the right very steady, levelling breast high.

## 7. Fire.

Here you must keep true motion in drawing the Trigger, doing it all together, so that the Fire of a Battalion may give but one Report, or appear to be no more than one Flash, the body steady, and the Musket close to the Shoulder till the next word of Command, which is,

## 8. Recover your Arms.

Hereupon suffer the butt end of your Musket to sink in both hands, till it be perpendicular, the right under the Cock, and the left as high as your Mouth always upon a Recovery, bringing it up before you upon a very quick motion, turning the right Heel, so that it may come up with the left In-step.

## 9. Half bend your Musket.

With your right Leg fall back, let the Muskets rest at once, the right Thumbs being upon their Cocks, and the right Fingers be-

behind their Triggers, then closing to the Thighs half bend, with your right hands placed behind the Lock, keeping them rested with fingers extended.

10. Clean your Pan.

This you may do by pressing the ball of your Thumb into the Pan, holding the right hand behind the Lock, that the posture may the better appear.

11. Handle your Primer.

In doing this, take the little end between your Thumb and Finger, turning the great end to the back of your Hand, your Arm bearing backward.

12. Prime.

Upon priming, level your Piece exactly upon a Line, and having Powder a little bruised, strike it into the Pan as much as is convenient, the left Toe being kept upon the Front.

13. Shut your Pan.

Here use your two first Fingers, casting your Primer back, and drawing up your right Heel to your left Instep, your Musket streight up before you Recover, with the Barrel towards you, done with a quick Motion, the Thumb of your right hand on the top of the Steel, and the left hand as high as your Mouth.

## 14. Blow off your loose Coyns.

In this case, bring your Pan within four Inches of your Mouth, and blow with a strong blast, observing to do it altogether, standing upright without declining the Head, casting out your Arms, and suffering your Piece to sink from the posture it before was in.

## 15. Cast about to Charge.

In doing this, let your right Leg advance, turning the Barrel of your Musket downwards, bringing it to your left side somewhat backward in your left hand, suffering none of your fingers to touch the Barrel, the Toe of the right Foot being directly to the Front, the right Heel over against the middle of the left Foot, the Musket ballanced in the left Hand, the Muzzle to a proper Front of an equal height, half a foot from your Body, your right hand joyned to the Muzzle of the Musket, and your Thumb extended to the side of the Barrel.

## 16. Handle your Charger.

This must be done with a full gripe, holding it even with the Muzzle of the Musket underneath about an Inch from it.

## 17. Open it with your Teeth.

Here bring it up to your Mouth without bowing your head, then bring the Charger within an Inch of your Muzzle underneath, covering the Chargers Mouth with the ball of your Thumb.

## 18. Charge

## 18. Charge with Powder.

Having put the Powder with a quick motion into the Barrel, hold the Charger underneath, as before.

## 19. Draw forth your Scowerer.

Upon this word, let fall your Charger, and by turning your hand, draw your Scowerer or Gun-stick at three motions, holding it level the height of your Forehead, your Arm extended, as if you were about to dart it.

## 20. Shove it to an Inch.

In this case, turning the great end of your Scowerer towards you, let it sink till within an Inch of the end, resting it against your Body some-what below your right Breast, stooping.

## 21. Charge with Bullet.

Having a Bullet in your Mouth, take it out with your right hand, and put it into the Barrel, placing the great end of your Scowerer just at the Muzzle of your Musket.

## 22. Ram down Powder and Ball.

Take a full grasp with your Thumb and Fore-finger, from the Muzzle your Thumb on the top of the Scowerer, keeping a handful in your hand.

## 23. Withdraw your Scowerer.

Your hand Thumb and Fore-finger being turned towards the Muzzle, clear your Scowerer at three motions, and dart it as before.

## 24. Shorten it to a Handful.

Clap the small end of your Scowerer to your Breast, slip it to a Handful of the end, holding it a little below your right Breast slooping.

## 25. Return your Scowerer.

Upon this, place it in its proper place, without expecting any word, grasp the Muzzle of your Musket with the right hand, your Thumb being extended upon the Scowerer, keeping it half a foot clear from your Side, the Muzzles directly to front all of a height.

## 26. Poise your Musket.

In this case, with your left hand before you bring up your Musket, grasp it with your right hand under the Cock, falling with your right Leg to your left, keeping it Poised directly before your Nose, being faced to the Front, let your right Elbow rest upon your Body.

## 27. Shoulder your Muskets.

In doing this, take the rule that has been mentioned.

## 28. Poise your Muskets.

Do this as before has been shew'd.

## 29. Order your Muskets.

In doing this, sink your right hand a little, take hold of the Stock with the left hand on the top of the Scowerer; then suffering the left to sink, take hold of the Muzzle with the



the right hand, the butt end easily sinking near the ground, when after a little pause, let them all come down together, giving as it were but one thump, then close to the right foot place the butt end about the middle of it, the Lock outward, and your right hand an Inch below the Muzzle.

30. Lay down your Musket.

Having turn'd it with the back upwards, you step forwards with your left Leg, and your right hand lay it on the ground, that it may lie in a streight Line with the rest, never laying it down with any other but the right hand.

31. Quit your Musket.

Stand upright, by raising your self with a fall back of your left Leg to your right.

32. Handle your Musket.

Here observe to step forward with your left Leg, and lay your right hand on the Muzzle of your Musket.

33. Order your Musket.

Upon this word, raise the Muzzle, and fall back with your left Leg to your right, turning the Lock outwards by the middle of your foot : And thus, in case of Fire-Arms, the postures are little different, as will hereafter appear.

*Instructions for Exercising the Pike, relating to the various Postures already mentioned in Command.*

1. Pike-men, take heed.  
Advance your Pikes.

**I**N this case, move your Pike upward in a direct Line, with your right hand near your side, your right hand well near as high as you can reach, depressing your left hand as low as you can, your fingers streight out, and raise your Pike till the butt end comes to your right hand, at what time, place it between your Breast and Shoulder, keeping your butt end close, that it may be more firmly upright.

2. To the front.

Place your left hand on your Pike even with the top of your Shoulder, casting your finger streight, bringing your Pike right before you with a very swift motion, drawing in your right Heel to your left Instep, keeping the Pike streight.

3. Charge.

In this posture fall back with your right Leg, suffering the heel of your left foot to be against the middle of your right, and bring down your Pike with a quick jerk, support  
your

your Pike with your left elbow, and Charge breast high, bending your left Knee upon yeilding your Body forward to fix your self the firmer, holding the butt end in the palm of your right hand, your left Toe directly pointing with the spear of your Pike, set your Feet at a moderate distance, to stand the more firm, and bring your Pike down a little beneath your breast, beware of clattering, close it to your breast when it is Charged.

4. To the Right, four times.

In this doing, turn your left Toe to the right, then make your left Heel come up with your left Instep with a quick motion, recovering your Pike straight before you, then having turned, fall back with your right Leg, Charge, as before, &c.

5. To the Right-about.

Here you must, by turning your left Toe, bring it to the Right-about, bringing up your right Heel, your Pike recovered, then Charge being turned with much quickness.

6. As you were.

Bring up your left Toe by turning to the Leftabout, then bringing your Pike recovered, your left hand must never be higher than your Mouth, your Feet in Order, when being turn'd, you must fall back with your right Leg and Charge, bringing your Pike straight up without Clattering.

7. To the Left, 4 times.  
 8. To the Left-about.  
 9. As you were.  
 10. Advance your Pike.
- } Do these as has  
 } been shewn in case  
 } of the Right, only  
 } observing 8 left  
 } Motions, &c.

In doing this, make your right Heel come up to your left Instep, having your Pike before you, fall out with your right Foot, and bring your Pike to your right Thigh.

11. Shoulder.

Your fingers of your left hand being extended, lay that hand on your Pike even with your Shoulder, then make your right Heel come even with your left Instep, your Pike right before you, fall back with your right Leg, and put back your right Arm as far as may be, holding your Pike about half a foot from your side, keeping your Eye upon the Spear, and that directly to the Rear, your Pike sloped, when forsakeing it with your left hand, bring in your right Leg, laying your Pike on your right Shoulder, keeping your Elbow to your Body, the butt end about half a foot from the ground in the middle of the distance.

12. Charge to the Front.

Here you must fall back with your right Leg, putting back as much as may be your Arm, keeping the Spear exactly to the Rear,

set-

setting the Pike aslope at the same height as shouldering, then bring the butt end backwards with your left hand, turning the head with your right hand, then quit it with that hand, and take hold of the butt end, and Charge breast high, the palm of your hand against the butt end open, and your left Elbow under the Pike, the left Toe directly with the Spear, and when you Charge, let it be directly forward, your left Heel being just against the middle of your right Foot.

13. *Shoulder as you were,*

In the first place, raise your Pike with both your hands, then quit it with the right, and with the left, turn the head backwards, the Spear directly with the Rear, then seize it again with your right hand as high as you can reach without straining, and stand with it from your Body aslope, bring up your right Leg, and forsaking your Pike with your left hand, lay it on your Shoulder, always keeping the Spear in a direct point to the Rear, not any ways crossing others.

14. *Charge to the Right.*

Here you must fall back with your right Arm and Leg, keep the Spear in the Rear, sloped at the height of shouldering, turning your left Toe to the right, let the right fall behind the left, that the middle of your right Foot may be over against your left Heel, and in this Action bring your Pike up, and turn  
back-

backwards the butt end by your right side, then pressing it in the palm of your right hand, Charge.

15. Shoulder, as you were.

Make your left Toe come to the left, and the middle of your right Foot against your left Heel, with your Pike up, then turn the head of it to the right, viz. directly to the Rear, doing it at one motion, then with your right hand take hold of your Pike, so with both hands keep it a little distance from your Body stop'd, as when you Shoulder, then bring your right Leg up, and lay your Pike on your Shoulder.

17. Charge to the Right-about.

Here you must with your Hand and Leg give back, and stand with your Pike a little distance from your side, turn your left Toe to the Right-about, bringing the butt end of your Pike to the right side, falling back with your right Leg, Charge, keeping the Spear of your Pike all the while to the Rear a shouldering height; being careful not to mount the Spear of your Pike higher or lower; and when you are to face to the Right-about level your Pike and Charge.

17. As you were.

Upon this word of Command, turn your left Toe to the Left-about, causing your right Foot to advance a moderate step, so that the middle of it be placed against your left Heel

Heel, bring the butt end with your left hand by your left side, observing the Spear to be exactly with the Rear, the same height as in shouldering, then as high as with ease you can reach, lay on your right hand, and stand with it in form, after which bring up your right Leg and Shoulder.

18. Charge to the Left.

In doing this posture, fall back with your Leg and Arm, as has been shewed in the former Chargings, turn to the left Toe, and turn the butt end of your Pike with your left hand to the Right, then bring up your right Leg and Charge.

19. As you were.

Here you must raise the Spear with both your hands, turning the left Toe to the Right, then fall back with your right Leg and Arm, holding your Pike from your side, the Spear directly to the Rear, then bring up your right Leg and Shoulder.

20. Charge to the Left-about.

In this case, fall back with your Leg and Arm, then bring the Pike over your head with both your hands, keeping the Spear directly to the Rear at the height of shouldering, turn your left Toe to the Left-about, then bring up your right Foot, so that the middle of it may come with your left Heel and Charge.

## 21. Post.

Do this as charging the Front, but be cautious, that you sink not the Spear of your Pike so low, resting it instead of the Elbow between the Thumb and Fore-finger, keeping the Elbow close to your side.

## 22. Compost.

In this doing, you must bring your left hand backward as far as you may, stretching out the right, making thereupon a step forward with the right Foot, firmly grasping the Pike with the right hand as far as you can reach, not tossing the Spear too high, this done, forsake it with your left hand, bringing back your right Leg even with your Left, then close the Pike to your side, keeping the Spear about the height of your Head.

## 23. Charge to the Front.

In performing this, let your right Arm be extended at the same time, advancing your right Leg putting back your left hand as far as you can, bring your Pike forward, upon which give a step back with your right Leg, take hold of the butt end with your right hand, then Charge, Charging ever breast high.

## 24. Fire.

Here you must face to the Right-about, suffering the Spear of your Pike to fall behind you, then let your right hand be quitted from



from the butt end, without moving the Left; take care likewise not to strike up the Spear.

25. Charge as you were.

In this Exercise, turn your self to the Left-about, take the butt end of the Pike on the palm of your right hand and Charge, keeping your Spear at an even height.

26. Advance your Pikes.

Here you must observe to bring your right Heel to your left Instep, as likewise your Pike before you to the Recovery, then fall out with your right Foot, till it come even with your Left, and by this means bring your Pike to your right Thigh.

27. Order your Pikes.

Raise your left hand even with the top of your shoulder, and lay it upon your Pike, your fingers stretched out, then sink your left hand, and raise your right, and so raise the Pike, that when the butt end is on the ground, your right hand may be against your Eye, setting the butt end to the Latchet of your Shoe, and keeping the Pike near your Head; and in this Exercise suffer all the butt ends to fall to the ground together.

28. Pikes to your Inside Order.

In this doing, you must fix the butt end of your Pike on the inside of your right Foot to the middle, moving only your Pike, and not your Foot.

29. Lay

## 29. Lay down your Pikes.

Here step altogether with your right Legs, stoop all together with a quick motion, and lay them very straight with your right hands.

## 30. Dust your Pikes.

With your left Leg fall back, bringing it even with your right, and stand up all together.

## 31. Handle your Pikes.

In this doing, step forward with your left Legs, in a quick motion, stoop all together, and extending your right hands as far as you can reach, grasp your Pike.

## 32. Order your Pikes.

Raise the Pike with your right hand, step back with your left Leg, clapping the butt end for the more easie raising about the middle of your right Foot on the inside.

## 33. Pikes to your Out-side Order.

To do this place, the butt end of your Pike on the outside your Foot, moving your Pike, and not your Foot.

## 34. Advance.

Do this as before : And thus have we given the Practitioner in Arms, The true Postures of the Musket and Pike distinctly, which with a little use, may perfect him in that which is so necessary to be understood by the Sons of *Mars*, from which we proceed to give further Instructions of this kind.

*Directions*

*Directions for the Exercise of the Pike and Musket together by a whole Battalion, or single Company, supposing the Pikes Advanced, and Muskets Shouldered: The word of Command given is,*

1. Musketeers make Ready.

**I**N this case, they must perform all the postures and motions directly together, till such time as they stand gaured with their Muskets before them, and their Thumbs for the better security on the Cocks, whereupon the Pikes are to be recovered before the Pikemen, the butt ends in the palms of their hands, and the Spears upright, their left hands no more than the height of their Mouths.

When the word Charge is given, then must they bring down the Muskets and Pikes at once, being sure to turn the left Toes that way they Charge, and the heel of the same Foot directly against the middle of the right Foot in every Charge, charging directly forward, not at first charging, the Pikes close to one anothers Breasts, but charge a little way distant in bringing down the Pikes, and when

when they are charged, then is the time to close them.

The Charge is, To the Right four times, Then to the Right-about, after that, As you were, Then to the Left Charge four times, Then to the Left-about Charge, Then as you were, which you may plainly observe in what has been laid down in the former Exercise.

Here the Pike-men must turn as the Musketeers, bringing up their right Heels to their left Insteps, extending their Arms as they turn, bringing their Muskets straight before them, their left hand as high as their Mouths, pulling back their Arms, and when they are faced, fall back with their right Legs, nor must the Souldiers bring down their Arms till the word Charge is given, doing it with a quick motion, and not suffering the Pikes to clatter.

*Then the word of Command is, viz.*

Recover your Arms.	} As before is noted.
Half bend your Muskets.	
Poise your Muskets.	
Shoulder your Musket.	

Hereupon, the Muskets being Shouldered, the Pikes that stood Recovered falling out with their right Legs, the Pikes are brought to their Thighs to their Advance. Poise

Boise your Muskets.

This Command given, the Pike-men must fix their left hands to their Pikes about the height of their Shoulders. Then

Order your Arms.

Pikes to your Inside Order.

Lay down your Arms.

Quit your Arms.

To the Right-about.

March.

These must be observed, as is before directed in the Exercise, which to repeat again would be Tautology, only thus much when you are clear of your Arms, you must disperse, and upon the beat of Drum run thither again with a Huzza, your Swords drawn, and their points upwards: Then these words of Command are given, viz.

Return your Swords.

Handle your Arms.

Order your Arms.

Pikes to your Out-side Order.

Advance.

These things ought to be duly considered, and in this first place, in ordering your Arms, observe to make a little stop before the butt ends come to the ground, that they may fall together at once; after the Arms are laid down and quitted, you must all stand up together, as if it were but one motion.

C

Upon

Upon marching from your Arms, Step Front and Rear together with the left Feet, and march but a little distance.

Your right hands being laid on your Swords, you must take hold of your Scabbards with your left hands, and your Swords being drawn, you must hold them upright before you, bringing them down at one motion, and when by Command you have returned your Swords, you must stand upright to your Arms, looking to your proper Front. As for the rest, we refer you to the Exercise of the Pike and Musket distinctly.

*Several things to be observed in Command and Exercise relating to the Match-Lock, Musket, &c.*

THE Match-Lock Musket in all the material parts of Exercise is the same with the Fire-Lock; but some other things being to be observed, we shall lay them down for the ease of the Reader, and this chiefly consists in keeping your Match well with a good Coal, fastning it upon Command, advantageously in your Screw, blowing the Coal, and trying your Pan by false flashes, laying it down at Command, taking it up again, shortening it

Step to the Pan, that it may give true Fire: But  
 ft Feet, more to the particulars.

1. Lay down your Matches.

Do this at four Motions, first by a little  
 turning the butt end of your Musket easily,  
 slipping on your Shoulder, lay then your right  
 hand on your Match: In the next place, ex-  
 tend your right hand and foot before you,  
 and recover your Musket in its place. Third-  
 ly, stoop and bring your Match near the  
 right Foot, within-side, suffering your Hand  
 to bend a little: Lastly, quit it, and bring  
 your Body upright, and your right Foot even  
 with your left.

2. When the Command is given, *Com-*  
*the* Handle your Match, then having recovered  
 it, bring it between your third and fourth  
 Finger by the help of your Thumb and first  
 Finger, always using your right Hand then  
 the Palm being turned from you, you stretch  
 your Arm towards your right hand Man.

3. Blow your Match. *ma-*  
*with* Hereupon bring your Match to your Mouth,  
 not stooping, but turning your Head a little  
 to the right, when having given a strong Blast  
 to carry off the Ashes, cast off your Arm to  
 the right.

4. Cock and try your Match.  
 In this case, fetching a compass with your  
 Arm, bring your Match to the Cock, and  
 supporting it with your two near Fingers,

press it down with your Thumb, guiding it with your middle Finger, when keeping your middle finger, between it and the Pan, pull your Cock down as low as the Pan, and sink or raise your Match, that it may hit the middle of the Pan, and having fired when you hear the word.

**Return your Match.**

Hold your Musket in your left hand, the Barrel towards you, suffering your left Elbow to rest on your Body, then take your Match between your Thumb and Finger in the right hand, placing your Thumb on the top of it, the palm being turned from you, placing one end of your Match between the third and fourth finger of your left hand, and the other end press with the first and second fingers, then with extended fingers place your right hand under the Pan.

This is all that is material as to the Match, the other postures of the Musket being the same with the Fire-Lock already mentioned.

*Directions*



# *Directions for the Exercise of Foot Granadiers.*

**T**Hough the Granadiers in many things differ from the Musketers in Exercise, yet for the better part they do the same, drawing up in the same Order, Rank and File, only they seldom draw up above three deep, and supposing them to be shouldered. The words of Command are,

*Lay your right Hands on your Fire-Locks.*

- |                           |   |
|---------------------------|---|
| 1. Poise your Fire-Locks. | } All these are to be done in the same manner as the Exercise of the Fire-Lock, Musket. |
| 2. Rest your Fire-Locks.  |   |
| 3. Cock your Fire-Locks.  |   |
| 4. Guard your Fire-Locks. |   |
| 5. Present.               |   |
| 6. Fire.                  |   |
| 7. Recover your Arms.     |   |

**8. Call over to the Left.** } In doing this, they are to lay their right hands on their Daggers.

9. Draw your Daggers.

Here they must draw their Daggers and hold them upright in their hands before them.

10. Screw it into the Buzle of your Fire Lock.

Do this so, that the flat side may be towards you when you have recovered.

11. Return your Arms.

12. Charge to the Right (four times.)

13. To the Right about, Charge.

14. As you were.

15. To the Left Charge (four times.)

16. To the Left about Charge.

17. As you were.

18. Recover your Arms.

These are to be done with a quick Motion after the manner of the Fire-Lock, Musket.

19. Cast to your Left.

Upon this, they are to seize their Daggers with their right hands.

20. Withdraw your Daggers.

Hereupon, hold them directly before you, the flat side to your Body.

21. Return your Daggers.

Upon this, put them up into the Scabbard.

22. Post.

22. Poise your Fire-Lock.

23. Half bend your Fire-Lock.

Do these as the Muskietiers do the Fire-Lock.

24. Open your Cartridge-Box, and handle your Primer.

These are easily understood, and need no direction.

25. Prime.

26. Return your Primer.

27. Shut your Pan.

28. Blow off your loose Coins.

30. Cast about to Charge.

Do all these as the Muskietiers.

31. Handle your Cartridge.

32. Open it with your Teeth.

33. Charge with Powder and Ball.

34. Draw forth your Scomer.

35. Shorten it to an Inch.

Here, by the Cartridge is meant, the Charge of Powder made up in a paper fit for the Peice, so that the Bullet being placed on the top of it, they may be put in together.

36. Ram down Powder and Ball.

37. Withdraw your Scomer.

38. Shorten it to a handul.

39. Return your Scomer.

40. Poise your Fire-Lock.

Do these as the Muskietiers do, according to the Instructions laid down, in their Exercise.

## 41. Shoulder your Fire-Locks.

Upon this Command, the Ranks are to close forward at six foot, it being the Sergeants care to place their Halberts at a due distance.

## 42. Poise your Fire-Locks.

Upon this, over and above what the Musket requires, seize the sling with your left hand.

## 43. Sling your Fire-Locks.

## 44. Handle your Pouches.

In handling your Pouches, let your left hands be on the bottom, all of a height, advancing the right Legs, and the right hands being of an equal height.

## 45. Open your Pouches.

Do this altogether.

## 46. Take forth your Granadoes.

Do this with the right hand extended before you.

## 47. Shut your Pouches.

Do this all at once.

## 48. Uncase your Fusee.

Doing this, step back with the right foot to the left facing.

## 49. Handle your March.

Do this with the left hand to the left side, extending your Arms, doing it nimbly altogether.

50. Blow

50. Blow your Hatch.

In this doing, the first Rank must fall back with their right Legs altogether, giving a strong Blast.

51. Fire your Fuzee.

52. Deliber your Granado.

At this last word of Command, the second Rank must advance six foot before the first with their Match ready to blow; and when they have observed the words of Command, the third must advance before them, when upon the word, Blow your Hatch, the first and second Ranks are to lay their hands upon their Hatchets; and upon the word, Fire your Fuzee, they are to raise their Hatchets; and upon that of Deliber your Granado, the Sergeants must be careful that the first Rank stands, the second Marches six Foot before the first, and the third six foot before the second, expecting the word of Command with their Hatchets raised, at what time the first Rank must raise theirs likewise.

Fall on.

In this case they must handle them fast, bringing them down.

Return your Hatchets.

Upon this you must put them into the frog of your Belt by your side.

Do these as  
 Poise your Fire-Locks. } in case of the  
 Shoulder your Fire-Locks. } Fire - Lock  
 Musket.

Granadiers make Ready.

In this case the first Rank must make ready their Fire-Locks, and the second Rank handle their Pouches, and the third their Hatchets.

The first Rank present.

At this word of Command, the second Rank must open their Pouches, take thence their Granadoes, whilst the third raise their Hatchets.

Fire.

Upon this word of Command, the second Rank must shut their Pouches, uncase their Fuzes, and handle their Match.

Recover your Arms.

Here without any further Command, the Granadiers of the first Rank must cast over to the Left, draw and screw their Daggers into the Muzles of their Peices, Recover their Arms and Charge, the second Rank to advance six foot before them.

Blow your Match.

Fire your Fuzee.

Deliver your Granadoe.

Upon this last Command, they are to Poise their Fire-Locks, and make ready, whilst the third March as the second with their Hatchets.

**Fall on.**

**Recover your Arms.**

At this last, the third Rank must march twelve foot before the first Charging, the second at six, the first returning their Hatchets, and making ready their Fire-Locks.

**Recover your Arms.**

Upon this they are to half bend their Fire-Locks.

**Cast over to the Left.**

**Withdraw your Daggers.**

**Return your Daggers.**

**Poisse your Fire-Lock.**

**Shoulder your Fire-Lock.**

**Face to the Right-about.**

**March.**

Upon this last 'tis the Serjeants duty to be careful, that forward the Ranks open to twelve foot, and that they so continue marching till they come to their Ground, where they must halt without any word of Command.

As you were.  
 Poise your Fire-Locks.  
 Order your Arms.  
 Lay down your Arms.  
 Quit your Arms.  
 Face to the Right about.  
 March.

In these ob-  
 serve the po-  
 sture of the  
 Musket.

Here observe, that when you are clear of  
 your Arms, you are to disperse, and upon  
 the Drum beating, you must hast to your  
 Arms with a chearful Huzza, your Daggers  
 drawn, listed with their Points upwards.

Return your Dagger.  
 Handle your Arms.  
 Order your Arms.  
 Poise your Fire-Locks.  
 Shoulder your Fire-Locks.

Observe these  
 as the Exercise  
 of the Musket,  
 Fire-Lock, and  
 the rest as they  
 have been laid  
 down, and you  
 may grow ex-  
 pert.



*Considerations of the Drum so necessary  
in the Exercise of the Foot, what re-  
lates thereto.*

**T**HE Drum has been very anciently used in War, and always approved by the greatest Captains; the Souldiers understanding thereby, what they are to do in many points, as well as by the voice of their Commander, and therefore it is called *seme-vocal*, and gives directions of sundry kinds in these six points of War more peculiarly distinguished, *viz.*

1. The *Call*. 2. The *Troop*. 3. The *March*. 4. The *Preparative*. 5. The *Battle*. 6. The *Retreat*. And of these in their Order.

1. The *Call* is to bring the Souldiers together to their Arms upon deliberate or urgent occasions, or to hear any Proclamation or Orders that are to be given by the Officers; so the Souldiers ought not, especially in time of War, on great Penalties, to ramble beyond the hearing of it, unless they be sent upon Parties, or by some Express, with the Knowledge and Approbation of the General or Officer in Chief.

2. The *Troop* being beat, the Souldiers must incontinently shoulder their Muskets, and

and Advance their Pikes, closing their Ranks and Files to Order, following their Officers to the place of *Randesvoze*, or else where.

3. The *March* beaten, you must observe to take your open Order in Rank, shoulder both Musket and Pike, and march quicker, or slower, as the Drum beats.

4. The *Preparative* is to warn you, that you close your due distance in preparing for Battle, or Skirmish, and see that nothing be out of Order that may turn to your Advantage or Hindrance, for a Battle seldom succeeds well where the Order is not observed with the greatest Exactness.

5. The *Battle* is that which is usually called the Charge or Signal, to Charge the Enemy; so that upon this the Souldier must raise his Spirit to the highest pitch of Fury; though with caution, for Valour and Prudence ought to go hand in hand, if you would attain to things noble and great.

6. The *Retreat*. This is beat when at any time the Enemy is too strong, or by drawing off to better your ground, you may gain a better Advantage, or expect greater Succour, as when an Out-guard or Party finds it self over-charged, it Retreats to the main Body, or when on a sudden, an advanced Party espies an Ambushment.

Besides these, there are two others used, but they are not properly called Points of War, viz.

The

*The Tatto, or Tapto, and the Revalley.*

The first of these is used in a Garrison, or upon the Rounds, both to warn the Souldiers and Inhabitants, when they ought to repair to their Quarters, or Guard, and when to shut the Doors, that so if any Spies be abroad, they may be the better distinguished; for when the Tapto is returned to the Body of Gaurds, a warning Peice ought to be shot off, after which no person ought to be out of his Quarters, or from his Post, unless the Watch-word be given him.

The *Revalley* takes, as is most likely, its Denomination from the *French* word *Reveiller*, which signifies as much, as to arise up, or awake from sleep, for this is beaten in the Morning, to give notice to the People, that they may be safely abroad, at which time the Out-Centinels are taken off.

There are of late other things signified by the Drum, as the manner of Exercise, but it being mostly according to Humour, the Drum-Majors ought to give it to every File-leader in writing, that so he may be able to direct his File by his Example, what they are to do till the Souldiers are perfect in it, and the reason why we so direct is, because it is variable, and not so substantial as the word of Command.

There

There are at this day in many Regiments *Hoitboys* used instead of the ancient *Flutes*, but they have no significant Sign, being only to chear and raise the Spirits of the Souldiers, that their labour may seem the less.

*The Exercise of Dragoons or Musketiers  
on Horse-back.*

**I**N this, to shorten any tedious Prologue or Intricacy, we will suppose the Dragoons to be ready in the Field, drawn up in three Ranks, having advanced their Muskets, the Officers taken their Stations, and all things in a readiness for the word of Command.

1. Dragoons take a care.
2. Sling your Muskets.
3. Make ready your Links.
4. Clear your right Foot of your Stirrup.
5. Dismount.

Here they must stand ready at their Horses heads, and the six out-side men continue mounted, that so they may hold and guard the Horses.

6. Link your Horses to the Left.
7. March clear off your Horses, and Shoulder as you March.
8. Halt.

Upon

Upon these words of Command, the Battalion by the care of the Officers, is to be formed as the Foot, *viz.*

1. Have a care of the Exercise.
2. Officers to the Right-about.
3. Take your Posts in the Rear of the Battalion.

#### 4. March.

In this Ordering, the Serjeants and Corporals must fall into the Flank, and Rear of the Battalion, and the Commission Officers form a Rank in the Rear.

#### 5. Dragoons have a care.

Upon this they must pull off their Gloves of the right hand, and stick them in their Girdles.

#### 6. Lay your right hand to your Muskets.

7. Poise your Muskets.
8. Rest your Muskets.
9. Cock and Guard.
10. Present.

#### 11. Fire.

#### 12. Recover your Arms with the Cock half Bent.

#### 13. Rest upon your Muskets.

#### 14. Handle your Daggers.

#### 15. Draw forth your Daggers.

#### 16. Fix them in the Hyle of your Muskets.

#### 17. Poise your Muskets.

#### 18. Charge to the Front.

#### 19. To the Right, Charge, (four times.)

#### 20. To the Right-about, Charge.

#### 21. To the Left-about Charge.

#### 22. To the Left Charge (four times)

#### 23. To the Left-about Charge.

#### 24. To the Right-about, Charge.

#### 25. Recover your Arms.

#### 26. Rest upon your Muskets.

D

#### 27. Handle

27. Handle your Daggers. 28. Withdraw  
 your Daggers. 29. Place your Daggers.  
 30. Poise your Muskets. 31. Rest your  
 Muskets. 32. Clean your Pans. 33. Open  
 your Cartridge Box. 34. Handle your Pri-  
 mer. 35. Sink and Prime. 36. Return  
 your Primer. 37. Shut your Pan with your  
 Fore-fingers. 38. Blow off your loose Corns;  
 At which time you must Recover your Arms.  
 39. Turn about to Charge. 40. Handle your  
 Cartridge. 41. Take out your Cartridge;  
 which done, you must presently shut the Box.  
 42. Open them with your Tath. 43. Charge  
 with Powder and Ball. 44. Draw forth  
 your Scoweters. 45. Shorten them to an  
 Inch. This must be done against your  
 Breasts. 46. Put it into the Muzzle of your  
 Musket. 47. Ram down Powder and Ball.  
 48. Withdraw your Scoweter. 49. Short-  
 en it to an Inch, as before. 50. Place  
 your Scoweter. 51. Poise your Muskets.  
 52. Shoulder your Muskets. 53. Poise your  
 Musket. 54. Rest your Musket. 55. Lay  
 down your Arms. 56. Dust your Arms.  
 57. To the Right about. 58. Partly clear  
 off your Arms and break: Being marched  
 clear off the Arms, they must offer, as if they  
 dispersed; but upon the first beat of Drum  
 they must swiftly return with a Huzza, e-  
 very one drawing (in that motion) his Sword,  
 then each must stand over his own Arms, to  
 expect

expect further Command, viz. 59. Return your Swords. 60. Handle your Arms. 61. Rest upon your Arms. 62. Poise your Muskets. 63. Sling your Muskets. 64. To the Right-about. 65. March to your Horses. 66. Unlink your Horses. 67. Shorten your Bridles. 68. Put your left foot in your Stirrup. 69. Mount. 70. Fasten your Links. 71. Unslung, and Advance your Muskets.

Though this Exercise is for the most part like the Exercise of the Fire-Lock, Musket, on Foot, whether to know any thing difficult, we refer you, yet these are many times obliged to fight on Horse-back, as being appointed, and necessary for the succour, either of Horse or Foot, as occasion or advantage offers; therefore it will be requisite to speak something of their firing on Horse-back.

*The Exercise of Dragoons on Horse-back,  
as to their Firing, &c.*

**T**HE Dragoons having advanced their Muskets on their right Thigh, must expect the words of Command, viz.

1. Join your left hand to your Musket.

2. Cock and Guard.

3. Rest your Muskets on your Bivle hand.

4. Present.

5. Fire.

6. Recover your Arms with the Cock half bent.

This being observed, they are in a posture to March, Wheel, or Face, as shall be Commanded, or seen most Expedient.

These Dragoons were at first entertained for swift Marches, passing deep Ways or Waters, to keep equal pace with the Horse, till the Foot at more leisure could come up; but being since found very necessary to defend against the shot of the Musketers, they have been continued, and are no more than a kind of Musketers on Horse-back.

*Granadiers on Horse-back, what their Exercise is, and how to perform it with Dexterity. &c.*

**T**Hese, as the Dragoons often fight on Foot, and therefore, though, when they are on Horse-back, they may be Exercised as the Horse; yet it is most convenient whenever they March, Wheel, Face, or Halt, that they do not bear up too close, nor do it in thick Files, but between every File leave



leave three foot distance at least, the easier to dismount, and March clear off their Horses, or Face about as occasion shall require, when in this manner being marched into the Field with their Arms loaden, Hats on, and the the word to *Halt* given, the Commanding Officer having bid Silence, must thus proceed, *viz.*

1. Granadiers have a care. 2. Sling your Muskets. In this doing, have your left hand upon your Sling. 3. Put on your Caps. 4. Right and Left-hand Men of each Rank, keep Mounted. 5. Clear your right Foot off the Stirrup. In this case they must handle their Muskets, casting them backwards. 6. Dismount. This must be done altogether with a quick motion. 7. Make ready your Links. 8. Link your Horses to the Left. 9. March clear off your Horses. This may be done by a third or second Rank, marching through as soon as clear, handling at the same time their Muskets. 10. Halt. 11. Lay your right hands on your Muskets. 12. Poise your Muskets, facing to the Right. 13. Rest your Muskets. 14. Cock and Guard. 15. Present. 16. Fire. 17. Recover your Arms. Here you must have your Muskets half bent. 18. Cast about to the Left. 19. Draw your Dagger. 20. Fix them in your Muskets. 21. Recover your Arms. 22. Charge to the Front. 23. To the

D 3

the Right, Charge (four times.) 24. To  
 the Right-about, Charge. 25. As you were.  
 To the Left, Charge (four times.) 27.  
 To the Left-about. 28. As you were. 29.  
 Recover your Arms; 30. Cast about to the  
 Left: Hold, on this word of Command, your  
 right hands on your Daggers. 31. With-  
 draw your Daggers. 32. Return your Dag-  
 gers. 33. Poise your Muskets. 34. Clean  
 your Pan. 35. Open your Cartridge Box.  
 36. Take out your Primer. 37. Prime. 38.  
 Return your Primer. 39. Shut your Pan.  
 In doing this, bring your Piece up quick be-  
 fore you. 40. Blow off your loose Coyns.  
 41. Cast about to Charge. 42. Take out  
 your Cartridges, immediately shutting the  
 Boxes. 43. Uncap your Cartridge with your  
 Teeth. 44. Load with Powder and Ball.  
 45. Draw forth your Scowerer. 46. Short-  
 en it to an Inch. 47. Place it in the Bar-  
 rel. 48. Ram home Powder and Ball. 49.  
 Withdraw your Scowerer. 50. Shorten it  
 to a handful. 51. Return your Scowerer.  
 52. Poise your Musket, (Do this before you.)  
 53. Shoulder your Muskets. Upon this  
 word, seize the Slings with your left hands.  
 54. Sling your Muskets. 55. Handle your  
 Pouches; the same with the Foot Granadiers.  
 56. Open your Pouches. 57. Take forth  
 your Granadoe. In doing this, extend your  
 right hand before you. 58. Shut your  
 Pouches.

**Touches.** Do this, that it may appear but one Motion, the left hands being held up all at a height. 59. **Uncase your Fuzæ.** In doing this, you must face to the Front, having fallen back with your right Leg, bringing it even with the Left. 60. **Handle your Match.** 61. **Blow your Match.** 62. **The first Rank, Fire your Fuzæ.** 63. **Deliver your Granadoe.** Upon this Delivery, you must unsling your Muskets.

At this Command, the second Rank must advance through the Right, having their Match in Order, ready to blow and place themselves six Foot before the Rank.

64. **Blow your Match.** 65. **Fire your Fuzæ.** 66. **Deliver your Granadoe.** Upon this your Musket being unsling, you must stand ready Cockt and Guarded; then the third Rank is to march on the Right six foot frontward of the second. 67. **Blow your Match.** 68. **Fire your Fuzæ.** 69. **Deliver your Granadoe.** This done, unsling, and stand Cockt and Guarded; and upon this Command, the first or proper Front must speedily March through at six foot distance. 71. **First Rank Fire.** After this word, the first Rank must fix their Daggers in the Muzzles of their Muskets, and the second and third must imitate the first successively, as the same words of Command come to their turn. 72. **Recover your Arms.** 73. **Call about to the Left.**

Rest. 74. Withdraw your Daggers. 75. Poise your Muskets; doing it to the proper Front. 76. Shoulder your Muskets. 77. To the Right-about. In this doing, take up your first ground in your March, opening your Ranks. 79. To your Leader. 80. Poise your Muskets. 81. Rest upon your Arms. 82. Lay down your Arms. 83. To the Right-about. 84. March. In marching, the Ranks must be broken in manner of dispersing, then upon beat of Drum, you must draw your Swords, face about, recover your Order, and return to your Arms with a Huzza. 85. Return your Swords. 86. Handle your Arms. 87. Recover and Poise. 88. Shoulder your Muskets. 89. Poise your Muskets. 90. Face to the Right-about. 91. Sling your Muskets. 92. March your Horses.

In this last performance, the second and third Ranks must March, and standing at their Horses heads, face to the Front.

93. Unlink your your Horses. 94. Fasten your Links. When this is done, you must shorten your Bridles. 95. Put your Feet in the Stirrups. Here you must lay your Muskets over your Saddles. 96. Mount your Horses. This must be done altogether, as if it were but one Motion, and the Officers whose business it is, are to see the Ranks compleated in good Order. 97. Handle your

your Swords. 98. Draw your Swords. 99. Place your Swords. Here you must put your Sword into your Bridle hand. 100. Handle your Pistol, which must be ever the Left. 101. Draw your Pistol. 102. Cock your Pistol. Here you must keep the Cock guarded with your Thumb. 103. Present. In this doing, bear up your hand even with the Cock. 104. Fire. Here you must observe not to take down your Pistol, till the next word of Command, which is, 105. Return your Pistol, and the same Order must be observed upon drawing the right Pistol, till you return it, &c. 106. Handle your Muskets. 107. Unslung your Muskets. 108. Mount your Muskets.

If you are to Charge on Horse-back with the Musket, which is not done but upon great occasion, the Peice being Charged, the words of Command are, viz.

1. Cock your Muskets. 2. Present your Muskets. 3. Give Fire. In this doing, you must keep your Musket in its posture, till the next word of Command, viz. 4. Slung your Muskets. 5. Handle your Swords. Do it by taking your Swords in your right hands. 6. March. In Marching, the Officers commanding, may bring them to any moving posture, as Wheeling, Facing, &c. by giving his words of Command with such deliberation, that those who are more peculiar to

to take notice, may see each Individual Part perform his Exercise, and that they manage their Horses as they ought.

These Instructions put in practice, may greatly forward the young Souldier, though indeed, a heedful practice is the Life of Exercise.

### *The Exercise of Horse so properly called.*

**T**HOUGH as to the words of Command in Exercise, they are not many, yet various are the Actions to be performed by them, as after we have given an account of the known words of Command shall be shew'd at large, and in this case, when a Squadron or Troop is appointed to Exercise, having their Carbines and Pistols Loaden, the Corporals must pass through the Ranks, and see that they are all ready, which done, the Chief Officer commands Silence, and gives the words, viz.

Lay your right hands on your Swords.

Draw your Swords.

Put your Swords in your Budge-hands.

Lay your hands on your Pistols.

Cock your Pistols.

Hold up your Hands.

Give Fire.

When you have given Fire, you must not let your Pistol hand fall till the next word of Command be given, *viz.*

Return your Pistols.

And this you must observe in Firing the right and Left again.

Lay your hands on your Carbines.

Advance your Carbines.

Cock your Carbines.

Fire.

Let fall your Carbines.

Take your Swords from your Bridle-hands.

Return your Swords.

These motions must be exactly observed, every man doing each particular motion at one and the same time; the word of Command for that purpose, being given deliberately, that there may be no mistake.

In drawing up a Body of Horse, that is, when the Body is drawn up, the Officers that command not in Chief ought to keep close to their Men, but the Chief Commandant must be about a Horses length before them, to see more exactly what is done; and so it must be observed in Marching: It is further to be noted at this day, that when a Squadron of Horse is to Wheel; if to the Right, the right hand men must not close to the Left as formerly, for that puts the Rank many times

times out of Order, but they must keep their Ground, suffering the left to come about whilst they only turn their Horses heads, observing their left hand Men.

This may serve for the Motions, which the Officers are to take care of, yet there remains many other curious Matters, to which we proceed.

*To Close the Files.*

1. If you would be at close Files. To close your Files, The right Wing File stand Close your Files. To the Right. To the Left. As you were. To the left Wing and stand. To the Left by Files close the Squadron. To the Right. As you were. The right and left Wing Files stand. By half Ranks close Files to the right and left; or by closing Files, you may cleave the Squadron.

*The manner of Closing the Ranks.*

File-Leaders stand. By Ranks close the Squadron to the Front. On the Front as you were, or open to the Ranks on the Front to the first distances.

*The manner of doubling Ranks.*

By half Files to the Right, Double your Ranks to the Front. File.



**File Leaders Advance your Rank. Half Files take your Ground. In this manner you may Command to the Left.**

**The first half File stand. By half File, Leaders on the left Wing double your Ranks to the Front.**

Now if you would reduce this again, observe the following Command, viz.

**Right Wing half Rank Advance your Ranks. Half File-Leader take your Ground. The first half File stand. By half File-Leaders on the right and left Wings, then double your Ranks to the Front, Carocolling to the right and left, then the last half File stand, and the first half File by Carocol to the right and left on the Wings, after this double your Ranks to the Rear.**

Here the first half File must observe to open the half Rank to the Right and Left. The first half File by Carocol, To the Right and Left double your Ranks to the Rear.

In this case, let the last half File open the half Rank to the Right and Left; and since these words Carocol and Conversion may appear difficult to understand, it will be convenient to explain the Motion.

When you are to Wheel by Carocol, observe that it is made by the depth or flank of of the Squadron, by which means the Rank, and not the File makes the Motion.

Con-

*Conversion in Wheeling is performed by the Front of the Squadron, by which means the File remains whilst the Rank makes the Motion.*

*Directions for Wheeling by Conversion with the Word of Command.*

**W**HEN we say to the Right by Conversion, it is to be understood, That you ought to close your Right Leg to the Horse, your Knee touching that of the right hand man's, and so you must do in the word of Command to the Left, as when we say, Close the Left Wing; then must the left Leg closed.

By half Ranks, and by Conversion, divide the Squadrons into two Troops.

In case you would reduce the Squadron, The Command is,

By Conversion, the Squadron into one Troop, or the left Wing, Advance by Conversion.

In wheeling by Caracol, the words of Command are, viz.

The right Wing to the left by Caracol, Face about to the Rear. Or it may be performed by half Ranks, viz.

By

By Quarter Ranks, and by Carocol divide the Squadron into three Troops. Then if you would reduce them, order Quarter Ranks and Squadrons into one Troop.

If you are to be Commanded, the Volt, Face, or Facing about, observe it in this manner.

Face about to the Right, Face to the Right by Controversion, Face about to the Right by Carocol, Face about to the Left by half File, Face about to the Right and Left.

*In case in Hay you are to be drawn up, Observe the following Order.*

By half Ranks, To the Right and Left draw up, in Hay, To the Front; and if to be reduced again, the proceeding is the same. By Carocol, To the Right and Left. As you were. By half Ranks, and by Carocol, To the Right and Left. Draw up in Hay to the Rear. Reduction, here the Command is, To the Front. As you were. By half Ranks, to the Right and Left, draw up in Hay. Reduction, By Carocol, To the Right and Left. As you were. By Carocol, To the Right, draw up in Hay. Reduction, By Carocol, To the Left. As you were.

*The Order of causing Horses to File off.*

File by Ranks on the right Wing, on the left Wing from the Squadron. File off by Ranks on the left Wing. Form the Squadron on the Right. File off by three Files on the Left Wing from the Squadron. Some, indeed, are for Filing off with whole Ranks; but the most Experience in this matter have found it most convenient to be done by Files, because three Files make a Squadron, which a Rank does not.

The next material thing to be considered is, the Doublings being useful for the strengthening any part of the Battle, as it shall be seen necessary, or required, consisting in these following Heads. As to the General.

1. Doublings of Length. } Front and Rear.
2. Doublings of Depth. } Both Flank.

But if you come to particulars, there are six sorts of Doublings; as thus, First of Ranks, that is, when every Rank doubles into the odd, and if it happen that the odd Ranks are to double, then let the Body face to the Rear, and you need not expect any other words of Command.

2. Half Files. } Here they are said to  
 3. Byngers up, } be doubled, at what time  
 they double their Rear  
 into the Front.

4. In case of doubling, the Rear it must be done when the half Files double to the Rear.

5. Observe that the doubling of half Ranks must be by the one Rank doubling the other, and every doubling is done by the passing through by Counter-marches intire or divisional doublings: And observe in the doubling of Ranks, that they are reduced by the doubling of Files, further noting that the doubling Files to any hand, by the doubling of Ranks to any hand, they are reduced.

In every Motion 'tis to be observed, that those who are to double, must before they quit their places, Advance and Poise their Arms, and the Commands being performed, they are to conform to the same posture as they observe those to be in, to whom they double whatsoever the Posture be.

If you go upon intire Doublings, they are to be performed by Order, as well in Rank as File, and in Divisional Doublings, must be at open Order, as well in Rank as File.

observing your right hand man in all Motions.

If your purpose be to strengthen a Battalion in the Front, Rear, or Flanks by Doublings, it may be done as to the Front and Rear by intire Doublings, intire Wheelings, Divisional Doublings, and Divisional Wheelings; and in the Flanks by Files, half Ranks, and Divisional Wheelings.

In this case, the words of Command are, Ranks to the Right, Double. March. Ranks as you were, March. Ranks to the Left, Double. March. Ranks as you were, March. Observing in these matters a general Rule, That upon any doubling of Ranks, or half Files, notwithstanding their turning to the contrary hand, they double on from the ground they double to. They (when they come to their own ground) must ever turn to the hand they double; and thereby they stand directly after their Leaders.

If you are for doubling of Files, that may be done in the same manner, holding in the same Order with the Reduction of doubled Ranks; and for the doubling Front, half Files, by the Rear half Files, the words of Command are, Half Files to the right hand. Double your Front, March. Rear half Files as you were, March. Rear half Files to the left hand, Double your Front, March. Rear half Files, as you were, March. And

And again, if you would reduce, let the Rear half File stand without facing, till they are passed by the Front, half Files, then let them fall after their proper Leaders; but if by the Rear you intend to double the Front, half Files, the Rear half Files are to march exceeding slow, the body standing still, and in the half Files be curious to observe well the right hand Men, and in doubling of Rear, half Files by the Front, half Files with the Reduction: The words of Command are, Front, half Files, to the Right about, Double your Rear, half Files. March.

In this case, the three Front Ranks, or Front half Files must turn to the Right about, passing on the right hand of the Rear, half Files doubling unto them, and then to face to the Left about to their Leaders, without expecting the word of Command; and in case of Command, viz. Reduction, Front half Files as you were, March, the Front half Files are to march slowly three foot distance from the right hand Man, directing more leftward, which reduces them to their former Ground.

If you are desirous to Exercise in Doublings, observe the following Method,

Having drawn up the Battalion, and if it consist of Musketeers, the Commander in Chief must give the word of Command, viz.

Musketiery shoulder your Muskets ; but if the Battalion be composed of single Pikes, those that are to march must be Commanded, viz. Ranks that are to double to the Right, Advance your Pikes. Ranks that are double to the Left, Advance your Pikes ; and this ought to be taken by the Pikes as a general Rule, when they form a Battalion of themselves, always advancing when they are to double, fixing their Pikes upon the ground when they make a stand, but different from this in some kind, when the Battalion is composed of Musketiery only for the Command, then is what is required in the ordering Musketiery alone, and Pikes alone.

To the right, double your Ranks in Front, March.

Here, if you would make your Doublings exactly true, then the Souldiers upon their parting from their left Feet, must come and place themselves in the middle of the distances of the Ranks they double ; and if the Battalion consist of six Ranks in depth when they are to double by Ranks, either in Front or Rear, then must it loose one Rank of the depth of ground, and the distances of the Ranks by that means shall become double to those with whom they were before doubled ; this being well observed, and you intend to reduce the Battalion, proceeding thus,

Ranks



Ranks as you were. Then to double to the Left, say,

To the Left double your Ranks.

If you intend to double your Ranks by half Files, the Command must be, viz. To the Right by half Files. Double your Ranks in Front March. And the same words are required to double the left by half Files, either in the Wings, or in the Rear; then to reduce the Battalion, the Command is only, Ranks as you were.

To double the Ranks in Front upon the Wings, so order it, that from the half File to the close File, the Battalion cut, or divide it self in the half Ranks, then the half Ranks on the left hand must face to the left, and double upon the Wings of those two that have not changed their ground.

The manner of drawing up a Battalion,  
and the Officers taking their Stations  
for Parade, when they are to receive  
the King, or General, &c.

**H**ere the Battalion, or Regiment being  
drawn up in Exercise, the Ranks at  
twelve Feet distance, and the Files at three,  
the Musketers sloping, and carrying their  
Arms well, the Pikes must order their Pikes  
in a close posture to their Bodies, holding  
them near to their Heads, the butt ends to  
the Latches of their Shoes: The Serjeants  
taking two, or one, on the right and left of  
every Rank at an equal distance, as the Souldiers  
are at in the File, but those on the Rear  
must place themselves at three paces from  
the last Rank of Souldiers, well ordering  
their Halberts, and having their Hats off,  
the Drums are to stand on the right, and  
the left even with the Front Rank of the  
Souldiers, and at the same distance one from  
the other. The *Hoitboys* are to be on the  
right of the Drums on the one side, and  
the Drums on the right on the other.

*The Officers Posts or Places.*

Lieutenants to be divided equally at the head of the right and left Wings of Shot, the Ensigns to be at the head of the Pikes in an equal Line, each two paces distant from the Body; the Captains to be divided on each Wing, advanced two paces before the Lieutenants, the Commander in Chief excepted, none are to be before the Ensigns, and he to be two paces advanced beyond the Captains, unless it be when a Regiment makes but one Battalion, and the Presence of the Colonel and Lieutenant Colonel be had, then the latter is to take his Post on the left hand of the former. The Major who must be on Horse-back, is to place himself in a direct Line before the Serjeants on the right Angle, somewhat more advanced before the Line of the Captains, and the Aid Major being likewise mounted in the left Angle after the same manner.

If the King be to be received, then Pikes must be Advanced, and Muskets Shouldered, the same likewise to the Queen; but to all others the Pikes are to be Ordered.

If a Company of Grenadiers belong to the Regiment, it must be drawn up on the right of the Battalion at three deep, about three paces being left between their Drums and those of the Battalion.

*The Order and Manner of Salute..*

As soon as it is observed the King approaches, the Drums must beat a March, and the Officers are to Salute in their Order as he passes by, keeping the Spear of their Pikes exactly with the proper Front, and not by any means turning their cross ways.

The Salute being made, they without making a Leg, or Bowing, are immediately to pull off their Hats, keeping them off with their bodies upright, till the persons to be Saluted are passed by.

The manner of the Ensign's Saluting is with their Colours at one Motion, bringing them near the ground directly before them, raising them altogether at one Motion, upon which they pull off their Hats as the former. The Serjeants are to stand with their Hats off, and their Halberts Ordered, facing the same way with the Battalion; and here it is to be noted, That if the Person to be Saluted goes round the Battalion, it must face as he moves, without altering the Posts.

This must be observed upon the private review of a Battalion, but if it so happen, that it be to be done in the Field, and the Army drawn up each Battalion, must salute with Pikes and Muskets Charged. The Musketers upon the approach to be Shouldered,

and the Pikes Advanced, when the Commander in Chief proceeds to give the Word, &c.

**Recover your Arms.**

Upon this bring your Pikes and Muskets directly before you the butt ends of your Pikes in the Palms of your Hands, and the right Heel brought to the left Instep, and when the Drum first strikes the March, you must Charge with Pikes and Muskets at one Motion, and keep your Arms in that posture, till the person to be Saluted is passed by; upon which these words of Command ensue.

**Recover your Arms.**

**Poste your Muskets.**

**Shoulder your Muskets.**

At which time the Pikes are to be brought to the Advance, but in case of Marching the Salute is somewhat different.

*Of Marching and the Salute, &c.*

In marching a Battalion, be sure in the first place, to see the Files close to the right or left in their marching Order, which is so much distant, as they can conveniently have the use of their Arms, without incumbering each other, and greater Bodies in this case require more distance than the lesser, as half a Foot and more from the right hand Man, and so in Order to the rest, when the Pikes being Advanced, and Muskets Shoulder'd. The words of Command are,

**Files**

Files close to the Right, (or the Left.)

To your close Order.

March.

Then each man is to turn to the hand named, and consequently closes to the distances and hand mentioned; and when this is performed, the next word of Command is,

To your Leader.

Hereupon the Serjeants are to see the Ranks kept at their twelve large Feet distance, and being thus disposed, if it march in a Body, the Lieutenants must be in the Rear, at the same distance they were in the Front from the Souldiers; the Serjeants that were in the Rear, taking care of the Flanks, that they keep even and well in Order, and upon the word March, they are in Front and Rear, to step with their left Feet forward all at a time, setting them down together, marching very slowly, the Pikes marching equal with the Wings of Shot, not in the least pressing upon each other.

When the Body is marched as far as is intended, then the Command to them must be, Halt.

To the Right about.

The Drums beating a Retreat, the Lieutenants in the same Order and Method, lead them back to their Ground, as was before observed; and there again the word of Command is Halt.

To the Right about. } viz. To the Left about.  
As you were.

At this word, the Lieutenants must quit the Rear, and come to their station in the Front, whilst the Serjeants in the Flank who were removed from the Rear, take their places again.

*To March in three Divisions, the Method and Order.*

IF you are to march a Battalion in three Divisions, the Captains must divide the one half at the head of the first Division of Shot, and the remaining half in the Rear of the last Division: And again, one half of the Lieutenants in the Rear of the first Division of Shot, and the remainder at the head of the last Division of shot: The Colours marching at the head of the Pikes, which are to be Advanced, the Commandant in Chief marching two paces before the Rank of Captains at the head of the first Division of Shot, the Captains and other Officers exactly keeping the distance they were at first posted at, when the Battalion was drawn up.

The

The Officers that are appointed in this case, to march in the Rear of the Division, are as they march off to fall after them; and the Serjeants that were posted in the Rear, are to take care of the Pikes upon their marching: As for the Drums, they are equally to be divided upon the Division, marching between the second and third Ranks. The Granadiers marching about twenty Yards before the Battalion, the Equipage of the Officers of the Front must march somewhat on the left hand, between the Battalion and Granadiers: The *Hoisboys* marching in the middle distance between the Colonel or Commander in Chief, and the Granadiers.

In marching, the Colonel and all the Officers must march with their Pikes underhand Comported, not suffering the Spear to descend too much, but keep it steady from swinging, &c. But if they have occasion to Salute, they must, as they approach, Shoulder all together, that is, every Rank of Officers as they approach, carrying them level upon their Shoulders, performing the Salute, as if it was the Action but of one Man; nor must the first Rank of Captains Salute, till the Colonel or Commander in Chief has performed it, not standing still, or medning their Pace when they Salute.

The Officers pulling off their Hats, as has been directed in the standing Salute, or in a

Bat-



Battalion drawn up for a Review. The Serjeants must march with their Halberts shouldered, the butt ends uppermost; always upon this occasion marching with their Hats off, when those that are to be Saluted pass by, not any being to Salute the same Party more than once standing, and once Marching.

As for the Major, and the Aid-Major, they have not any fixed Post appointed in Marching, but are attending for Orders on the Colonel or Commander in Chief; and if an Ensign be absent, a Pike-man, as he is qualified, claims the carrying or holding the Colours before either Serjeant or Corporal.

If it so happen, that a Battalion in the March be attacked, they must immediately thereupon draw up, and face either the same way they March, or wheeling to the Right or Left, recovering thereby what Advantages you shall see necessary.

*How*

*How a Battalion ought to be Ordered  
if Attacked.*

**I**F you are marching in three Divisions, or a greater number, then if you be Attacked, and obliged to wheel to the Right, the first Wing of the Musketers must draw up on the right of the Granadiers, and the Pikes on the right of the right Wing of Musketers, whilst the left Wing of the Musketers takes the right hand of the Pikes, which is done with more Ease and Speed than by marching round the Rear.

As soon as you prepare for Defence, or the Chief Commander is for drawing up the Battalion in the same Method, he gives the words of Command, that the Rear, half Files of Musketers do double their Front to the Left in Marching, and upon the first Command to the Musketers, to make ready, *viz.* ( to be Cock'd and Gaured ) the Pike-men without expecting Command, are to Port their Pikes, and the Drums to beat a Preparative, whereby the Rear must take notice to draw up, and at the same time the Ensigns must give their Colours to the right hand Man of the respective Companies, who immediately must retire with them to the Center of the Pikes, and the Ensigns taking the

the Souldiers Pikes, must march at the head of the Pikes: As for the Drums that before marched between the Ranks of the Musketers; as likewise those of the Granadiers, that are to be joyned with those Drums that march with the Pikes, and the *Hoitsboys* must joyn the Colours.

When the Drums beat the Preparative, the first Division excepted, every Division is to march up with as much speed as may be, not breaking or falling into any Disorder, the first Division marching slower, and not altering its former pace.

The Ranks in marching must observe to close forward at six foot, which must be well directed by the Serjeants who are to look to the Order.

The Granadiers are to be divided into three parts, no part exceeding each other, and one of these parts must be with the Captain at the head of the Pikes, about eight paces from the first Rank, and the other two parts on the right and left of the Battalion, when those at the head of the Pikes are to receive the word of Command, *Present*, and *Fire*, and the first Rank of Musketers are commanded to *Kneel*, and when they have fired, they must make ready their Granadoes, and after the two other Ranks *Fire*, then are they to deliver their Granadoes, and place their Daggers in the Muzzle of their  
Fire-

Fire-Locks, and those Granadiers placed on the right and left of the Battalion, are to make their Fire as the Musketers Fire, *viz.* The two last Ranks must fire with the Musketers, and when they have so done, they must fix their Daggers in the Muzzles of their Fire-Locks, then the Front of Granadiers must have their Granadoes ready, and likewise when the first Rank of Musketers kneel, they must do the same, and when the two last Ranks have fired, they must stand up, and upon the firing of the first Rank of Granadiers, they must deliver their Granadoes, and fix their Daggers in the Muzzles of their Fire-Locks as the others.

Observe, that when the Adverse Battalion is so near, that the Granadoes may fall amongst them, the Officers and Souldiers keeping their equal distance, the Commander in Chief gives the word to *Halt*, at which the Drums must cease, and the Officers whose Post is at the Front, must Rank at the head of the Battalion two paces distant with their Pikes Ported, and four of the Serjeants that marched with the Pikes before they drew up, must draw up with them, *viz.* Two with the first Rank, and two with the last on the right and left of each Rank, and the remaining Serjeants to be on the Ranks, and to be assisting to the Officers in the Rear, who are to be those Officers that took their march in the

the Rear before they were drawn up, and are to continue in the Rear of the Battalion, to take care of it, all except the eldest Captain who is to come up immediately to the head of the left Wing of Shot in the Front, and the Serjeants are to be very exact upon the Battalion, drawing up to order the Ranks at six foot distance, and the Files at the same, every Souldier for the better use of his Arms, and the passage of the Enemies Shot, to keep at least a Foot from his right hand Man.

When the Commander in Chief has given the word Halt, the next Command is, Ranks of Musketers Kneel.

This is to be done by falling back with the right Legs, without moving the left, keeping your Muskets so low, that the two other Ranks without incommoding may fire over them, and upon the giving this word, the Rank of Officers posted at the head of the Battalion, must fall at once into the Intervals behind the first Rank of Souldiers, taking care at the same time, that the Officers perform their duties. The Officers having their Pikes in the posture conformable to the Pike-men, and those with the Musketers must observe to kneel as the Musketers do.

When the word of Command is given for the first Rank to kneel, the other two Ranks of Musketers are to close forward, and in the same manner the five Ranks of Pike-men

as they can with conveniency, and use their Arms without any word of Command.

**Two last Ranks Present.**

This must ever be observed to be done breast high, the first of the two stooping without any word of Command, and at the same word the Pikes are to Charge, and continue Charged.

**Fire.**

**Recover your Arms.**

At which word of Command the foremost or Front Rank must stand up without expecting further Command, at the same time their Muskets being recovered straight before them, Cockt and Gaured.

**Front Present.**

**Fire.**

**Recover your Arms.**

**Club your Muskets.**

**Fall on.**

This must be done with a Shout or Huzza, the Pikes continuing Charged, and the Drums beating another Preparative.

**Halt.**

Upon this word given, the Drums must be silent, and now in case of a Reduction, it must be done by this order of Command, &c.

**Poise your Muskets.**

Hereupon the Pikes must be recovered from the Charge; the Granadiers must take their Posts, as before they were divided.

**Shoul-**

their **Shoulder your Muskets.**

The Pike-men at this word of Command, must bring their Pikes to their Thighs, to their Advance, the Rank of Officers Advancing together before the head of the Battalion two paces.

Ranks open backward at twelve Foot distance.

**March.**

Rear half Files of Musketers that doubled to the Right-about, as you were.

**March.**

Officers, Colours, Drums, and Hoitboys to your proper Posts.

**March.**

If it so happen that a Battalion be more than once to Fire in Exercise, then before you fall on, instead of Clubbing your Muskets, when the first Fireing is over, the Musketers as they March, must make Ready, and the Pike-men Port, noting by the way, that every right-hand Man (being a Pike-man) of each Company must ever march with the Ensign's Pike.

The Drums must bear the Preparative at what time the first Division draws up, either in Battalion or single Company, being the most ready way to give notice to the Rear to draw up likewise; when the Preparative is beat, the Pikes Shouldered are to Advance, except the Command be given to the Muske-

tiers, to recover their Arms, and then the Pikes are to Port, but not otherways in drawing up, but at the Advance; neither must the Ranks close forward, or mend their pace in Marching, but to draw up as at other times, except the Command be given to the Musketers, to recover their Arms, or make Ready being the same posture, then they are ever to march, as has been before directed.

*In Marching by Subdivision, what is to be observed.*

**I**F a long March be designed for a Battalion by Subdivision, the Files must be counted and ordered according to the wideness or narrowness of the ways they are to March, posting one half of the Captains at the head of the first Subdivision of Shot, and the other in the Rear of the last, dividing the Lieutenants to every Subdivision of Shot for their better care of them, the Colours being likewise divided to march at the head of every Subdivision of Pikes, and the Serjeants are always to march on the Flanks, never leading or bringing up a Division, except Command-  
ed,



ed, and those Serjeants that are placed at the Rere of a Battalion, when drawn up, are ever to take care of the Pikes. In Marching, and in this way of Marching they are to March shouldering, in Files, but not in such Order as to jostle, or incroach upon one another; and although at sometimes it may fall out that more Men may be in one Rank than in another, yet the Spaces must not be Left but they are to file in Marching shoulder to shoulder, the Captains and Officers ever to March with their Pikes under-hand, unless it be when they pass by a General Officer, or advance before a Guard, which they are to Relieve, or off the Parade, in which Cases they are to shoulder.

### Defiles, *their Management.*

**A** *Defile*, properly so termed, is a mirey Lane, or difficult Place of Passage; if it happen withall to be narrow, and to make good the Passage you would draw up as soon as you have passed it in order, then make the Ranks Files, and if the Right, the Right-hand man is to File first, and the rest of his Rank must follow him: then are they to Rank again as they were, which proves

more advantagious than Files fileing; for this Reason, *viz.* Because it presently makes a Front to the Enemy; and in case of great Ranks, they may File two a Breast, beginning with the outermost File-Leaders, and if the space will admit, that is in large *Files*, the Commander may make a Front by Drawing off, as appears best to his Discretion.

*Wheeling, what it is, and how to be observed, &c.*

**W**heeling is a Motion in Military Exercise which, by turning, brings the Head of a Battalion to the Flank ground, which is extremely necessary, if the Wing of a Battalion be attacked, or when you see it advantagious to attack the Enemy in the Flank; and on many other occasions as the advantage, or disadvantage of War offers. But to the purpose:

The Battalion drawn up, the Officer in chief gives the Word of Command, *March*, and when the Battalion wheels upon the first Head of the right hand File, then it wheels to the Right, and when it do's the like upon The Left, it wheels to the Left.

A *Quarter Wheeling* is termed the first *Wheeling*, as it happens when they take a Compass to possess their own, or the Ground left by another Battalion; and in all *Wheelings* such compasses of Ground must be taken as that they leave no gap, nor press each other out; and to avoid this, every Man must take notice of his distance at File, the Word of Command being given to Wheel, and then if you are to Wheel to the Right be sure to keep that distance from your right-hand Man, the Ranks taking great notice of their Leaders, closing very quick to the Left in the Rear, observing to do the like to the Right, if the Battalion wheel to the Left.

*The manner of Wheeling a Battalion, or Body, when they March in Division.*

The Battalion being upon the March, and commanded to Wheel, when it is so ordered to the Right, the right hand Man keeps his ground, only turning upon his heel, whilst the left hand Man moves about with a swift pace, till he makes an even Line with the right-hand Man, and the Word be given to Stand, the second Rank observing not to begin to Wheel till they have taken the ground of the first; by which means every Rank is to March successively

sively forward up to their Leader's ground before they attempt to wheel, for therein lyes the dexterity of this way of Wheeling.

The Soldiers before they offer to Wheel must take notice of that hand in Marching to which they are to Wheel, for as the Right hand Man is to be noted upon the March when they Wheel to the left; so on the contrary the Left hand Men when they are to Wheel to the Left. If the Service requires Wheeling in single Ranks, observe

*The Manner of Wheeling in single Ranks.*

When it is requisite for the Service to wheel in single Ranks for lining or guarding. The Words of Command are, viz.

Ranks to the Right, or if to the Left, then

Ranks to the Left-hand Wheel, March.

The Right, or Left-hand Man, to which the Wheeling is made, being to keep his ground, only turning till the Line comes direct, the rest being all to Wheel together in one Rank, and at the Word of Command March, the Colours must wheel in before the Ranks, the Drums taking their Places on the right and left of the Ranks, as must the Sergeants observing that they be closed to the right or left, without leaving any unseemly Spaces; and to Reduce again, observe the following Order.

*The manner of Reduction.*

**I**N doing this, the left-hand Man of each Rank must stand, and keeping his Ground only turn about to the Left, and at the word *March* the rest that compose the Rank must wheel to their places.

*The manner of Wheeling backwards by Half Ranks.*

Here you must observe there must as near as possible be an equal number of Men in every Rank, the right and left-hand man of each Rank standing firm on his ground, and turn only to the hand named, the words of Command being, *viz.*

By half Ranks wheel to the right and left backwards, *March.*

Whereupon the Battalion opens the half Ranks, separating and falling back to the right and left-hand Men, which leaves an intervalle, and forms two Ranks opposite to each other, the Officers and Colours dividing in the same manner, taking their Posts and Ranging before the Souldiers to make a Guard, the Serjeants and Drums placing themselves equally on the right and left: This being observed, the manner of Reduction

duction is by these Words of Command, *viz.*

By half Ranks to the right and left inward. Form your Ranks as you were. March.

Here the half Ranks are to wheel from the right and the left, and close the interval, by which means they become whole Ranks; for having wheeled inward at the word March, they are no more half Ranks but whole Ranks in a Marching order. In case of Closings and Openings there are divers words of Command required, *viz.*

Ranks close forward to Order, *viz.* (three foot) March.

Ranks close forward to close Order, *viz.* (a foot and half) March.

Ranks open backward to Order, *viz.* (three foot) March.

Ranks open backward to open Order, *viz.* (six foot) March.

Ranks open backward to a doubling distance, *viz.* (12 foot) March.

In this manner of proceeding to open backward the Ranks must fall backward in Order, without changing the Aspect, having ever regard to their Leaders and right-hand Men.

The further Words of Command are, *viz.*

Files close to the Right, March.

Files close to the Left, March.

Files close to the Centre, March.

Files open to the Right, March.

Files open to the Left March.

Files

**Files open from the Centre, March.**

By the Files opening to the Centre, is meant their facing from the Centre, and if there happen to be an odd File, that remains and is properly termed the Centre File.

When Files are to open to the right, or to the left, they must keep their station without Changing in any manner, till the word **March** be uttered; whereupon they are to face to the hand named, taking their distances commanded, each from his Leader. In all Openings, as has been said, the contrary Man must be observed; if the Command be to open to the right, the second File from the right must by short steps first take its distance, suffering the Leader to pass as far as it is commanded, before you move, the rest of the Files in their turn and order observing to do the same; as for the left-hand File it is not to move; in all Openings they are to move directly forward with a slow pace.

*Thus the young Souldier may his Duty Read,  
But now to greater Things we must proceed;  
The Ratling Drum and Trumpet calls us on,  
A Souldier's Work you know is seldom done,  
But ever Travels with the glorious Sun.*

*A fur-*

*A further Consideration of Doublings,  
Relating to Foot, &c. and their Re-  
duction.*

1. **R**anks to the Right double, March.
2. Ranks as you were, March.
3. Ranks to the Left, March.
4. Ranks as you were, March.

In case of doubling the Ranks, those that are to do so, must observe their right-hand men, and move, as they move, beginning to move with the Foot next the hand then named, and so to come into Order, this doubling the even Ranks, must be observ'd to double into the odd, & when the odd Ranks are to double, you must face the Body to the Rear, and the like words of Command will perform it, or you may further proceed, viz.

Odd Ranks that stood to the Right-about, Double the even Ranks.

*The Reduction of Ranks, &c.*

Those Ranks that double, must face first to the contrary hand, and then with the contrary foot bring themselves to the former Ground, but not to move in the least, till the word March be given, and this is held upon all doublings of Ranks, and half Ranks, not-with-



withstanding the contrary hand is to be turned to, they must double on to the Ground they double to, yet coming to their proper Ground, they there must turn to the hand they doubled, and thereby they are brought directly to their Leaders. And in the like manner Files are doubled, remaining much the same with the Reduction of doubled Ranks.

*The manner of doubling Front, half Files, by half Files of the Rear.*

The words of Command in this case are,  
**Half Files to the Right hand Double your Front. March.**

Rear half Files, As you were. **March.**  
 Rear half Files, to the left hand double your Front. **March.**

Rear half Files, As you were. **March.**  
 If this happen upon the March, the Rear half Files must then move into the Front by a very swift motion, the Front half Files at the same time continuing there, each observing the right-hand Man.

In case of Reduction, the Rear half Files must not face about, but stand still till the Front half Files are passed, and then fall in, and follow the proper Leaders, but if the occasion require the Front half Files to be doubled by the Rear, the Rear half Files must march soft pace, observing their right-hand

men, so that all the Ranks may double at one time.

Observe in Reducement, as it is in the doubling of single Ranks, that no man must move till the word of Command, *March* be given, upon which they turn all together upon the contrary hand they doubled on, and when they come up to their own Ground, they must turn to the hand they doubled to.

*Rear half Files doubled by the Front half Files.*

Here the words of Command are, *viz.*

*Front half Files to the Right-about, double your Rear half Files.*

This word of Command given, the three Front Ranks, or three half Files must turn to the Right-about, and going on the right-hand of their Followers, or the Rear half Files, they must double into them, and when they have doubled, face to the Left-about to their Leader, without expecting any word of Command.

*The manner of Reduction.*

The words of Command are,

*Front half Files, as you were,*

*March.*

Whereupon the half Files must march slowly, keeping at three foot from their right-

right-hand Men, by which means they incline to the left, and are brought directly upon their former Ground; and it is only doing thus, and observing the contrary hand in doubling to the Left.

Now it remains that somewhat more particularly then has been said of the several manners of Firings be laid down, &c.

*The manner of Firing to the Front.*

When the Souldiers are to Fire, and keep their Ground, 'tis expedient that the Body be made close as well as in Rank as File, as will stand conveniently with the use of Arms, and hereupon, Command must be given, viz.

Musketiars make Ready all.

Then they are to have their Arms straight before them ready Cockt and Gaured, and the Pikes being Ported, they must charge when the Musketiars Present, and then ensue the farther words of Command, viz.

The five first Ranks kneel.

The Rear Ranks Present.

Fire.

The Fifth Rank stand up.

Present.

Fire.

The Fourth Rank stand up.

Present.

Fire.

**Fire.**

In this manner the rest must be Commanded, & when they have fired, they are to Charge again, and make themselves in readiness, to expect the next word of Command, and this Order of Firing may be performed by two or three Ranks at a time, the first kneeling, the second stooping, and the third standing up.

In firing to gain ground, observe this Order, The Battalion marching, he that is to give the word of Command proceeds thus,

**First Ranks of Muskettiers make ready.**

**Halt.**

Upon this the intire Battalion must Halt, then he is to Command the Muskettiers of the first Rank,

**To Present.**

**Fire.**

And as soon as they have fired, they must recover their Arms, not expecting any word of Command, and with a swift pace File off to the Right and Left into the Rear, observing ever when the first Rank Presents, the next Rank is to make Ready, and as the first files off, the next must make good the Front, Battalion marching, and every Rank to fire in this Order, and at the presenting of every Rank, the Pikes without Command.

*The*

*The manner of Firing to the Front, Retreating.*

If the Enemy press your Battalion in Front, and you cannot make good your Ground, you may to prevent their pressing on Fire, Retreating in single Ranks in the same manner, as when you are to gain Ground, except, (after the firing of every Rank, and their having filed off to the Right and Left into the Rear) instead of the next Ranks advancing to make good the Front of the Pikes, the Pikes must make their Retreat to the Musketeers, who must keep their Ground till the Pikes make an even Front equal with them, and the rest of the Ranks in their Firing and Retreating, are to observe this Method.

*The manner of Firing in the Flanks*

If a Battalion be upon the March, and is constrained by reason of the pressing of the Enemy to Fire, to both Flanks it is to be thus performed,

Keep the Ranks at six foot distance, and the intervals of that distance must be carefully observed between the Muskets and Pikes in their Divisions, and this must be done by causing the Musketeers to incline to the right and left upon every firing to the Flanks.

The words of Command are, viz.

To the right and left hand, Files of Musketeers, make Ready.

Which they must do, and keep along with the Body, not facing to the Flanks, till they are commanded to Present; and when they have fired, they are to face to the Rear; being thereupon lead a thwart very quick by the Serjeants, and so up between their own Divisions and the Pikes, and as soon as ever the next Flank Files Present, those that succeed or support them, are to make Ready without expecting the word of Command, as in many other cases has been instanced, keeping a long with the Body till they are bid Present, and this Order must be observed, till all the Files have fired, each man upon firing falling back with his right Leg, in case of firing to the Rear, which many times stands in stead, especially upon being Charged by a greater number, or upon a Retreat; you must observe the following Order.

*The manner of Firing in the Rear.*

The words of Command directing this way of Firing are first,

The Rear Banks of Musketeers make Ready.

By which is understood Cocking and Guarding.

Then

Then Present.  
Fire.

Upon these words, the Souldiers must turn to the Right about, casting their left Legs backwards, then Present and Fire, which done, they must recover their Arms without any word of Command, marching up into the Front, and there taking their Stations, and note, that as soon as the first Rank is bid Present, the next is to make Ready without Command, but must not face to the Rear till Commanded to Present; and when the first Rank is bid to Present, the Pikes must march till such time as the Rear of the Pikes are even with the next Rank of Musketeers that have made Ready, by which means room will be left in the Front, for that Rank that fires, to bring themselves up even with the first Rank of Pikes, every Rank being to do the like by the same Order.

### *The manner of Firing the Street-way.*

**T**his Firing is generally made to defend against Horse that attempt to Charge in the Front, when the Pikes are few, then the Rear half Files of Pikes must double the

Front; upon this Command, viz. *Rear half*  
*Files of Pikes to the Right.* Double your  
 Front.

*March.*

*Musketers to the Right about, March.*

The Musketers being clear of the Pikes,  
 the following Commands are to be given.

*Musketers face to the Right and Left, in*  
*march.*

*March.*

Upon this Command, they are to joyn the  
 Center of the Pikes, and the Commandant  
 proceeds, viz.

*Face to your Leader.*

Hereupon the care of the Officers must be  
 to observe the Shot, and the Pikes equally  
 Wing, the former keeping no more distance  
 from the latter then to give space for  
 the Ensigns, Drums and Hoitboys to come  
 between, then the Captains are to take place  
 in the first Ranks of the Pikes, and the Lieu-  
 tenants with the Musketers; and according  
 as the Body is bigger or lesser, one or more  
 of the Serjeants must see the two first Ranks  
 of Musketers to face to the right or left, and  
 when the Command is given by the Chief  
 Commandant, viz. *Port your Pikes.* The  
 Musketers of the two first Ranks must make  
 Ready, and at the word *March*, the two first  
 Ranks are to be brought up by the Serjeants  
 to the right or left according as it is ordered.

who



who by two and two filing up, they thwart under the Pikes, and there they are to face to the proper Front, without expecting any Word of Command, and to make two Ranks, and that some fire may be ever reserved, 'tis most expedient to fire but one Rank at a time, the second being cock'd & guarded to stand either of them as near to the Pikes as the Management of their Arms will permit, then the Word is to be given, viz.

**First Ranks of Musketeers march.**  
Upon which they must fall back with their right legs, keeping their left fixed, their arms upright before them, their left hands even with their mouths; then the further word of Command is given, viz.

**Present.**  
**Fire.**

Immediately upon firing they are to recover their Arms without expecting the word of Command, and so file off on the contrary hand they advanced on, with as much speed as they can, the Serjeants leading them close by the Body unto the Rear, placing them there, in their proper Files.

The Musketeers being commanded to Present the Pikes must port very low without any other word, and in the same Order to raise their Pikes as soon as they have fired to their proper heighth, the sub-altern Officers always minding, that the next Rank of

Musketeers be ready on the Angle to make their March under the Pikes, instead of the second Rank which is to take the Place of the first when the first Rank has fired.

In this manner of firing, if the street to be defended be very broad then a space, or interval must be made, over and above the passages on the flanks, sufficient for two Men a-breast, which will prevent the Horse from making any advantageous Attack.

To reduce this Order, the Words of command are, viz. Musketeers face to the right and left outward, March; and as soon as they are quit the farther, Command is given, viz. Musketeers to your proper front March.

This they must observe to do till such time as they are even with the first Rank of Pikes, and then the Officers, Drums, Colours, and Hoitboys must take their proper Posts.

When the Musketeers are ordered to march, they must observe to do till such time as they are even with the first Rank of Pikes, and then the Officers, Drums, Colours, and Hoitboys must take their proper Posts. When the Musketeers are ordered to march, they must observe to do till such time as they are even with the first Rank of Pikes, and then the Officers, Drums, Colours, and Hoitboys must take their proper Posts.

*Of the hollow Square, and the manners  
of forming it by Words of Command.*

**I**f you proceed to this, the Battalion must  
be drawn up in Ranks, at Twelve Foot  
distance, the Files being at three, then the  
Muskets shouldered, and the Pikes advanced  
the Words of Command ensue, *viz.*

Colonels, Drums, and Volt boys to the  
Centre of the Pikes, *March.*

Ranks close forward to Order, *March.*

Then outward Files of Pikes on the Right  
and Left, double your Files to the Right and  
Left inwards, *March.*

Half Files of Muskettiers to the left hand  
double your Front, *March.*

Files close all to the Right, to your close  
Order, *March.*

To your Leader. Pikes face square.

Pikes close forward to the Front. Left

Wing of Muskettiers to the Right about.

Both Wings of Muskettiers *March. Halt.*

Muskettiers face to the Left, *March. Halt.*

Face to your proper Front, all Officers and

Serjeants take your Posts, *March.* Gra-

nadiers take your Posts in the Angles,

*March. Face square. Muskettiers make  
ready.*

At this VVord the Pikes must be ported very low, when the Muskietiers present, and the next VVord is, *First Rank kneel*, which must be done in such a manner that the two last Ranks may advantageously Fire over. Then again, *The two last Ranks present, Fire.* Having fired, the next is, *Recover your Arms*, upon which the first Rank is to stand up with their Muskets recovered, ready cock'd and guarded, whereupon the two Ranks that have fired take the opportunity to Load again, and these VVords of Command ensue, *viz. Front Ranks present, Fire*, which done, the Commandant proceeds, *viz. Recover your Arms*, and hereupon the Pikemen recover from their Port, then again *To your Leader, March, Halt, Face Square, &c.*

These being performed after the same Order, they may March, and fire to every Front, noting that when they are bid to Face to their Leader, it must be to the Commandant in chief, wherever he takes his Station; but in facing to the proper Front it must be done to the Front of the Battalion, as it was before; it was formed into this manner of Figure:

*Words of Command used to reduce this Form.*

The Battalion being faced to the proper Front, the Commander in chief proceeds, viz.

Granadiers take your Posts on the right of the Battalion, March.

The Right and Left of each Wing of Mousketeers face to the Right and Left outward, March. Halt.

The three Files of Pikes of the Right and Left that doubled as you were, March.

Mousketeers face to the Right, March. Halt.

To your Leader.

Here halt Files of Mousketeers that doubled to the Right about, as you were, March.

Ranks open backward to Twelve foot, March, Colours, Drums, and Coltrays to your former Posts, March.

Files close to the Right, to close Order, March. To your Leader.

Things

*Things proper to be observed by a Commander, being in an Enemies Country, &c.*

**H**E must be carefull to observe the situation of the Place, and gain as good Intelligence of the Enemy as he can, and if he Command a Troop of Horse, he must be ware of skirting the side of a Wood, for fear of an Ambush, the strength of Horse, consisting in the open Country, as that of the Foot do's in a VWood; for the Enemy is all ways to be expected to take advantage; it is therefore dangerous for a Troop of Horse, by reason it may be fallen upon before it can get to any secure Post.

An Officer of Foot marching through an inclosed VWoody Country, must avoid, if he can, marching in the middle of a Plain, or too near a VWood, by which means if the Enemy approach he will have time to consider what course to take; and if he be attacked by Horse, then ought he to retreat unto the Wood, Skirmishing to make it good; for if he get into it, the Horse will not attack him there; but if he has to deal with Foot, and observes himself the weakest, he must regain the last Defile, or narrow Post, and drawing up in Battalia, dispute it, till he  
can

can better secure himself ; and the like is to be observed by the Horse, if overmuch pressed ; wherefore it is good for a Commander to take special notice of the places he passes through, sending his Scouts before him to discover the Enemy, and search the Places where Ambushes are suspected ; for although it be in a Village, there may be a Party of the Enemy there, who will suffer the Scouts to pass by, and conceal themselves till they see an opportunity to set upon the main Body.

When an Officer is arrived where he intends to Encamp he ought to Draw up his Men, and having set his Guards, he may permit them to take some ease, by alighting from their Horses, if it be Horse, or if Foot, to repose themselves, always facing towards the Town or Place possessed, or suspected to be possessed by the Enemy, having, if possible, a Defile in the Front and Rear, or some other security ; to prevent surprize, the Scouts ought to be sent out from one half hour to another, and when day appears they may venture farther into the Country, and if there be no convenient Town, or Place, the best way, if two or three days March in the Enemies Country, is to lye in a Wood when it has been well searched, to prevent an Ambush ; nor must an Officer suffer his Men to straggle, though he be near a Friend-ly

ly Town; for it may so fall out that a Party may lye hid, who taking that advantage may fall upon him, and rout him, though a lesser number; for there it is the Enemy most commonly lays Ambuscades, thinking, as it often happens, that by a Confidence of Security they shall find Men negligent and disordered.

When at any time the VWord is required of a Party you meet, it is generally given by the weakest, however it ought not lightly to be credited, nor the Souldiers to Return their Arms till the Officer be assured whether they are Friends or Foes; for many times a Deserter may betray the Word to the Enemy, and he make an advantage of it.

---

*Considerations in Marching an Army through an Enemy's Country, &c.*

**I**F the War be carried into the Enemies Country, to besiege or relieve any place whether the Enemy keep the Field or be beaten, Caution ought to be had, especially in Case of the former, nor is it otherwise to be believed but he may Rally again; wherefore it behoves the General to March close



close so that the Army may be in a Condition to open its passage to do which it ought to be divided into little Bodies the Cavalry placed upon the Wings in Front and Rear of the Bodies, the Infantry, marching in the middle, in a gross Battalion, the Artillery upon one side guarded by an experienced Regiment, and so it happens that an Army never undergoes more difficulty than in an inclosed Country full of Woods, and Rivers especially if in an Enemies Territories where so many difficulties will arise.

### *Of marching in a Woody-Country, &c.*

THE most probable Advice that can be given in this case, is to send the Pioneers supported by Horse and Foot, to cut open ways of more easy passage, fill up the Ditches, and lay over Bridges, and to do what else is required, getting by Scouts, and commanded Parties; what Intelligence there can be had, and the General not trusting altogether to others, must be careful to inform himself, and if he meet with a Bridge, or difficult Pass defended by Curtains, Bastions, or any other Heights; the Engineers having well

well viewed it, it will be convenient to detach a Party, to try whether the River be fordable, and these being Horse, may carry over each a Foot-man behind them, which will more facilitate the Passage, but if there be an Eminence to defend it, on which Canon are placed, then he may raise a cross Battery in the most advantageous place, and endeavour to dismount their Cannon; but if the Entry be fortified with a Bastion, then a commanded Party of resolute Men must be detached to attack it, which must be done suddenly, and with much Vigour, for that daunts the Enemy, when on the other hand, delay encourages them to stand out.

---

*How a General ought to behave himself  
when he meets with Castles and strong  
Fortresses in his March.*

**T**O overcome these Difficulties, the Engineer and Marshal *De Camp* must look out the most advantageous ground to place the Cannon for Battery, and observe the Enemies Cannon how they bear, as also their Sally, Ports, &c. And if he designs to make himself Master of them, he ought to take the most

most convenient Posts, not only to annoy them, but to prevent their being Succoured, and raise a convenient Battery on the weakest side, or that which by the Approbation of the Engenier lies most open to the Attaque, causing the ground to be distributed for an Incampment, as the Quarter Master General shall think fit, and if the place to be forced prove strong, Earth must be cast up to secure the Approaches from the Cannon or Shot, running Lines Travers-wise, and Indenting, so that they cannot bear upon those that approach, till they come to the breach made by the Batteries, or undermining any part, where they can charge their Mine, and throw down the Wall, but if it be not of extraordinary Strength, requiring a formal Siege, then a resolute Party may be detached from the main Body, supported by others with Scaling Ladders, Faggots, Spades, Shovels; Pick-Axes, &c. to fill up a Trench or Ditch, whilst the Armed Bands attempt to force the Gates with Petrades, or the like Engins, or scale the Walls, ever maintaining and making good their Posts; but in this case the Methods are various, as the Service required, offers it self more or less difficult; and therefore we presume not to give exact Rules for what frequently alters.

*Of Encampments, and how they are  
usually Managed.*

**T**Hough the manner of Incamping frequently is attended with some Variation; yet to give the young Souldiers an insight in these Affairs will not be unnecessary as to what has been lately practised.

When an Army, or any great Body is to Encamp, it is usually disposed in Lines with a Reserve, concluding the ground at the same time to be convenient for the so receiving them, and if the Lines are but two, there ought to be 300 paces distance between them at a yard, the Pace and the Squadron of Horse have for every one five and thirty paces of ground allowed, and the like space between the one and the other, that so without disorder, they may march out if there be any occasion to lugage.

As for the Infantry, if they Incamp six deep, they must have 80 paces at three Foot, the pace allowed, or more if the Scituation of the ground require it, and between the Squadrons of Horse and Battalions of Foot, the Line must be forty or fifty paces distant. The Artillery ought to be placed upon the first Line of Infantry at such Advantage as  
may

may best annoy the Enemy if they come to make any Aattaque.

The Baggage and Ammunition take their place between the second Line and the Body of the Reserve on the right Hand, and the Provisions on the Left, or near the Tent of the Commissary General of Provisions.

The Quarter Master and Serjeants as well Horse as Foot, are to pitch their Tents in the Front, or Head of their Squadrons or Battalions, and the other Officers Tents behind : The principal *Corps du Gaurd*, and the Parading place claims to be at the head of the Camp, where the Arms, Ensigns, and Colours are Lodged.

The Posts of the Horse are on the Wings, and the Foot take their Station in the middle, and to every Squadron, consisting of three Troops, and fifty Men in a Troop, fifty paces are allowed, and every Battalion consisting of 16 Companies, and 50 Men in each Company ought to have 100 paces for their Incampment.

As for the Dragoons, they are not Encamped in the Body of the Army, but have their Camp a little separate at the Head or Wings, to which the greatest danger seems to threaten, as being the out-gaurd for the Army, and each Regiment ought to have a Gaurd at the head of their Camp, and the Major General for that day is to take care to

place the great Guard in a convenient place, at a distance from off the Army towards any expected Danger, which may discover any approach before it come too near, and thereby prevent any Surprise, for Caution is to be used where Danger is not, as well as where it is.

*Remarks upon the Encamping of Horse.*

**I**N Encamping a Troop, if it consist of 100 Men, they ought to have 70 Foot in Front allowed them, and 200 in depth, eight Foot in breadth, and 12 in depth must be accounted to two Horse-men to make their Hutts or Barques, and the Men and Horses are to be Lodged in two Ranks, the Horses heads standing towards the Hutts of their Owners, yet between the Hutts and Stables there ought to be an Interval of eight Foot: The Captains Tent to be at the head of the Barques of his Troop, possessing the whole Front, and between the Lodging of the Captain and the Troop, there must be the space of 20 Foot, a Lane of 10 Foot must be likewise between the Stables, that the Horses may be brought out without incumbering each other, and

and behind the Troop, the Butlers ought to place themselves at about 20 Foot distance, and if any considerable number of Troops Encamp together, then 20 Foot distance is allowed between Troop and Troop, or more, as the commodiousness of the ground will allow.

*The manner of the Incampment of Foot.*

A Hundred paces is commonly allowed for the Incampment of a Battalion of Foot, divided by the Quarter Master into several Stations, he allowing for each Hutt or Lodging a Square of 7 Foot, 12. Foot to the By-street, and 15. Foot to the great Street; and two Foot distance between Hutt and Hutt, every Company composed of fifty Men, ought to have ten Hutts; and the Kitchen for dressing Provision, ought to be just over against the Hutts at 12 Foot distance, the length of the Kitchen 12 Foot, and the breadth 8, standing about 30 paces from the Captains Tents, and 40 paces between the Tents of the Subalternate Officers and the Captains, the remaining ground being for the Encampment of the Field Officers, and the Captains Equipage, the Hutts of the Sergeants are to

be at the head of the Souldiers, opening to the Front, the Suttlers to Encamp behind the Tents of the Officers at a convenient distance, & about 30 paces are allowed between one Battalion and another; the Colonels, Field-Officers, and Staff-Officers, Tents ought to be in the Center of the Battalion behind the Captains Tents, and the Pikes to be at 18 Foot distance from the Hutts, the Muskets to stand the like distance, and the Drums and Colours to be placed within the hollow of the Pikes.

*Things worthy to be observed in Relation to Garrisons.*

**T**Hose Officers that take place in a Garrison are usually a Governour, a Lieutenant Governour, a Major, Aid-Major, and Captains of the Gates.

The Governour above others is obliged in this case to have a care of the Place, and see that there be no wrong done to the Inhabitants, and furthermore he is to appoint the Guard Rounds, and Patrolls, to give the Word each Evening, visit the Posts, keep the Officers and Soldiers in such Order that their



their Duty be performed, observing that frequent Parties go abroad to get Intelligence, and thereby prevent surprize; and in the Governour's Absence the Lieutenant Governour has the same Charge upon him, and commands with the like Authority.

The Major's Care is to see the Guards mounted, the Posts and Rounds assigned, he Orders the Sentinels, and goes every Evening to receive the Word from the Governour, giving it about to the Quarter-Master and Serjeants upon the Place of Arms, and likewise goes his Rounds; the Major also visits the Corps of Guards, and observes that the Soldier's Arms are well placed, and in good Order, ordering the necessary Ammunition to be distributed amongst them, he takes care of the Gates being shut and opened, and is accountable to the Governour of what passes, and gives him a Relation thereof, and indeed the Officers that are in Garrison are to be obedient to the Governour or Commander in chief, and not to stir thence, without leave in Writing.

The Captains of the Gate are to go morning and evening to the Governour's House to receive the Keys, that they may open and shut them, and frequently there is in the Garrison, if it be in a Frontire Town more especially, a Commissary of the Artillery or Store-keeper, whose care it is to keep a

Reckoning of the Ammunition, and to distribute it according to the Governour's Order, and always one Gunner is to be upon the Guard at the Batteries. There ought to be likewise a Commissary of the Provisions, and if there be any suspicion of an Enemy, some of the Garrison ought always to be at the Gate, to observe Strangers that go in and out, and the Centinels are to suffer no Carts or Waggon to stand or stop upon the Bridge, or under the Gate, and the Inn-keepers, and others, must give an Account to the Major every night what Strangers they Lodge.

As for the exact time of Mounting the Guards it cannot be set down by reason many vary, being set sooner, and others later, as pleases the Governour, but the frequent time is about Two in the afternoon, and while the Drums give them that notice the Sergeants and Corporals cast Lots at the Major's House for the Posts and Rounds, which are writ down in a Register to that intent; then they return to their Companions, who assemble before the Captains Quarters, and if only detached Men mount, and not whole Companies, they are lead by the Sergeants, the Drums beating the while, as far as the place of Arms, and when the Detachments are drawn thither, and formed in a Readiness to Mount the Guards, The Major

of Aid-Major, makes the Captains, even to the Serjeants, draw Lots for their Posts and Rounds, always observing in the weakest Places to post the strongest Guard with skillfull Officers, and not till the Officers have taken their Posts do's the Major order the Main Guard, or Guard of Arms to March off: then he causes those of the Gate and Bastions to do the like, and after them, those that were without, and during the time the Guard is mounting those Officers who are to be Relieved put their Men in a posture of Arms, and Draw off from the Guard, posting themselves at the Head of their Souldiers, over-against those that are to take their Places, and deliver to them whatever Orders there are, whilst the other Corporals do the like to the Corporals that are come on, and those that are Relieved being Drawn up at the Place of Arms, they are there dismissed, in order to refresh themselves.

Those Officers that have Mounted the Guard proceed thereupon to Command the Souldiers to set down their Arms, the Pikes at that time being advanced, and the Muskettiers shouldered, which is done upon these Words of Command, viz. *Retournez vos Armes.*

The Banks file off by Division to the Right and Left March.

Set down your Arms in good Order.

This done, the Corporals upon the Soldiers setting down their Arms, receive Orders to be carefull in all things that they may be in a Readiness to prevent Danger, or Surprise; and here the out-Sentinels upon the approach of any Stranger, whether Horse or Foot, are to make him stand, and call their Corporal, who is to give notice of it to the Officer, and he to send him to the Governour's House, with a Guard, to know his Business, and if the Centinels discover any Troops, though at a great distance, they are to give notice to the Main-Guard, and the Officers are to make the Barriers fast, and draw up the Bridges, suffering none to pass unless an Order be brought from the Governour, by the Major, or Aid-Major.

There is in all, or most Garrisons, a Bell to give notice to those that are abroad to repair home a little before the time of the Gates being shut, and then the Keys are fetched from the Governour, and returned again, so that none can pass after the Gates are shut; and then one half of the Guards Draw off upon the Rampart to pass that night in the Corps of Guard in the Bastions or Curtains and whilst some Soldiers are ordered by the Corporal to fetch Fire and Candle, the VVords are received by the Serjeants at the Place of Arms, and then it is carried to the Officers, and dispersed a-  
bout

bout amongst the Corporals, and after that,  
 none, whether Towns-men or Strangers are  
 to be upon the Ramparts, without giving  
 an Account of themselves, especially when  
 the Tuptoe is beaten; and the Major him-  
 self, when he goes the Rounds is received  
 by the Officers of the Guards by their Cor-  
 poral, attended by two Muketiers giving the  
 Word but once, *viz.* at his Round-Major,  
 but when the Governour or Commander in  
 chief is received upon the Rounds he may  
 require the VVord as many times as he thinks  
 fit; all other Rounds are obliged to give the  
 VVord, and the Corporal receives it with  
 his drawn Sword at the Breast of the Party,  
 and where there is the least thing suspected  
 in a Garrison, the Rounds go frequently as  
 every quarter of an hour, that the Ramparts  
 may not be unprovided, and care is taken to  
 know who neglects; and thus Rounds are  
 made with Light; wherefore at the Ap-  
 proach of it, the Centinel must demand  
 VVho comes there? with such an audible  
 Voice that it may be heard by the next  
 Guard, and he that approaches must reply, or  
 may be in peril; for the Centinel is not to  
 let him come within his Arms, and the An-  
 swer is generally the Round, the Round  
 Major, or the Governour's Round being to  
 be received not by the Centinel but the  
 Corporal, who is called forth for that pur-  
 pose,

pose, and he is to bid him that has the Word Advance, which upon coming forth he gives him in his Ear so softly that it cannot be over-heard; but if the Word be wrong, the Officer of the Guard is to have notice, and the Party to be secured, if he sees occasion; and although in the night time it is observed that the Centinels stand with their Pikes charged, and rest their Muskets upon the passing by of the Rounds, yet in the day-time it is the contrary; for then the Pikes are ordered, and the Muskets shouldered. As for the out Corps of Guard they pass the Rounds about the covered Ways; but there is no Word required of them, they being only to listen, and give notice if any thing happens.

As for the Patrolls they are made in the Street by a Serjeant, commanding about six Soldiers of the Main-guard, and then the Soldiers are to be in their Quarters, and all publick Houses within the Garrison to shut up their Doors; and at any time when the Alarm is rung, all the Soldiers are to hasten and present themselves before their Captain's Quarters, in order to his Leading them to the Posts assigned by the Major; and when day appears the Reveille is beat, and the Boys are fetched again from the Governor, and the Soldiers are commanded off the Posts, and drawn in two Ranks with

to that it has happened when there has been a breach wide enough to enter they must not attempt it; though indeed the manner of fortification is various throughout Europe. But the late Model has been indifferently uniform; and in case a Town be well fortified, and an Army comes to besiege it, a false View must be taken, and the true Nature

*A Survey of War-like Fortification,  
and what is to be observed in Sieges,  
&c.*

**I**F a Town be defended by Out-works, a Ditch, or Mote Bastions, Flankers, Curtains, or Counter-mures, and the Garrison be strong, it was the old Way to build Forts at advantagious Places, but now they proceed in a Siege, by making Trenches, raising Batteries, Mining and gaining Lodgments, which indeed is the quicker way, and the most secure from the Cannon of the Town. The best Fortification is held to be built Octangular, by which means the force of the Cannon is much abated; for the points of the Angle flant the shot, or if it make a breach in the hollow Cavity, yet the Angles serve as Flankers on either side to hinder the Approaches of the Besiegers, so that it has happened when there has been a Breach wide enough to enter they durst not Attempt it; though indeed the manner of Fortification is various throughout *Europe*, yet the late Models have been indifferently uniform; and in case a Town be well fortified, and an Army comes to Besiege it, a serious View must be taken, and the true Nature



ture of the Ground, as well as the Scituation of the Place, enquired into, with the Number of the Garrison, and especially the Courage, Conduct, and Reputation of him that Commands; for as it is in an Army so it is in a Town, a valiant Governour, whose Courage is carried on with Prudence, will better defend it with a small Garrison, than some with a very powerful one, as the famous City of *London-Derry* has instanced to the immortal Honour of her worthy Governour, Mr. *G. Walker* whose Name shall live in spite of all that Malice can devise; *Vienna* likewise, under the brave *Staremberg*, in the year 1683, held out till Relieved against an Army of 120000 *Turks*, being the Flower of the *Ottoman* Empire, and yet neither of these Cities had any thing considerable to trust to in their Fortifications: But to return.

The place being viewed, and the ground ordered to be broke, the Pioneers once set on work, must make such places or Lodgings that those who enter them may be able to succour their Fellows against any violent Sally of the Besieged, having Issues and Passages for passing and re-passing as the best advantage shall require.

Having made these Advances, the Artillery must be planted upon Batteries raised with Earth, and staked with Timber, secured with Gabions or Baskets filled with Earth, or else

else the Engineers cannot be secured from the Fire of the Town, Wool-packs were formerly used on this occasion, and are not altogether laid aside in the present management of Sieges, planting your Batteries something a-flant, that the Cannon if recoyling, may the easilier be brought up again, and always in this there is one Battery bigger than the rest, called the Royal Battery, which generally fronts the Town besieged, and is frequently raised as high as the Walls, and these Batteries must labour to dismount the Cannon of the besieged, as well as batter the Walls, for thereby the Enterprize will be facilitated, but many times the Flankers are covered in a manner by the Counterscarp, which must there-upon be laid open, or possessed by the besiegers, to gain a more uninterrupted Access, and if the besieged Parly, and send out to make terms, Hostilities ought to cease till those that came out are returned, unless the besiegers will refuse to hearken to any Parly which is not often observed, unless the matter be carried so far, that the breaches are laid open, and there is no way or means for a longer Defence; then instead of gaining Conditions, they are forced to surrender upon Discretion.

If by Battery, Mining, throwing Bombs, or a perpetual tiring the Enemy, the Town is faultable, and a general Storm be intended,

it must however be the General's care as much as in him is to keep his Intentions from the besieged, but pretending one thing suddenly change, the Order into another, for by it the Enemy is accused, and the Souldiers Spirits are kept up, this Rule was observed by the Duke of *Lorain* in taking of *Buda*, and proved very successful, as it has done in the like upon other occasion.

*The Court Martial, or Council of War,  
what is to be considered therein.*

**I**T is necessary the young Souldiers should have some insight in this Affair, to prevent his ignorantly incurring Danger, and in this Case in an Army, or Incampment, the Council of War meet at the General's Tent, or Quarters, and to this are called the Lieutenant-Generals, the Major-Generals, the Brigadiers, as likewise the Collonels, and Commanders of Bodies, where it is requisite, or that the Matter concerns their Regiment.

There are private Court-Martials, or Councils of War, frequently held in Garrisons, and these may be held at the Governor's House, or in any other convenient place

place, as the Governour shall appoint; or if it be in a Camp it may be at the Collonel's Tent, and he thereupon is to send notice to the Captains of his Regiment to be present; those whose business it is to be there being assembled, the Collonel, or Governour, or whose Right it is to be President, takes place at the upper end of the Table, and the Captains in their Degree, and if there be no Judge-Advocate, or he be absent, the Town-Major, Aid-Major, or Quarter-Master, discharges that Office, and accordingly takes his place at the lower end of the Table. As for the Lieutenants, Sub-Lieutenants, and Ensigns, they have Priviledge to be there but only as Spectators with their Hats off, and if the Matter be of consequence, after it is opened by the President, the youngest Officers gives first his Opinion, and so the rest in Order, the President being the last, and being put all in Writing, the Matter happens conform to the plurality of Votes and then is to be signed by the President; if the matter is to be judged of by this Council or Court, then the Party accused is brought before them, and being informed of what he stands accused, the Questions proper to the matter of his Accusations are asked him, and then he has Liberty to reply, as in case of civil Judicature, when being withdrawn in the custody of the Marshal  
who

who is the Goaler of this Court, the proof against him is considered, and every one gives his opinion upon his Conscience, and he stands or falls by the plurality of Voices, and being called in and made acquainted with what has been determined, the Sentence is pronounced by the President in the name of the Court, &c. and if he be guilty 'tis the business of the Provost Martial to see it put in Execution, and if the Punishment be publick, the Regiment ought to be drawn up Spectators, as a warning to them in offending, &c. but a Souldier for the Honour of the Profession is not to undergo any infamous Punishment before he be degraded of his Arms, and his Coat in publick strip'd off, and to frame this Court, there must be no less than Seven, the President being one, many times for want of a sufficient number of Superiour Officers, Inferiour Officers are admitted, but not often.

*Of divers Figures in Battel-Array, or  
for Firing, &c.*

**T**Here are various Figures wherein an Army or a Body of Men may be drawn up, besides these we have named, wherefore for the satisfaction of the more curious, and for the greater variety, it will be convenient to insert them by way of Prospect, &c.

If you would draw up a cross Battle in the following Figure, you may do it with a private Company, or as many as you please, and to bring them into form: The words of Command are, *viz.*

The first two Ranks wheel your Front into the midst.

The two last Ranks wheel your Rear into the midst.

These words being given, the next Command must be,

The rest of the Body face to the right and left, March.

The March must be continued till the Rear of the four Divisions make an even Hollow that may be square, after that, the Commander must go into the middle, and give these words of Command, *viz.* To the Center face all, by which means he



If you would fire upon this Figure, consider there are two ways in general, and of these first it is to be noted when the Muskietiers give Fire, thereupon placing themselves in the Rear of their own Division, the next Rank is after they have Fired, place themselves in the Rear of the Pikes.

*To Reduce the Cross Battle.*

The Officers in the middle must give the Command, viz. *Face all to the Centre*: And then further proceed to Command those Divisions that were Flankers, viz. *Close to your Order*.

---

*The four fronted Battle, called the Plynthium, how to frame it by Command.*

**T**O order this, the Command must be, viz. *Half Files of Pikes Face to the Rear*.

*March.*

This they must observe till clear of the Ranks of the Muskietiers, and then the Command is,

*Half Files of Muskietiers Face to the Right and Left.*

*March.*

This

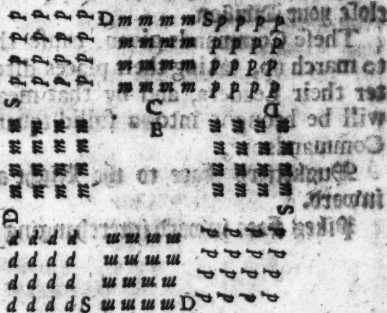


This must be done in marching between the Divisions of Pikes, then the further word is,

Left half Banks of the first Division of Muskettiers Face to the Right, and March between the Rear Division of Pikes.

In this case it is noted, that the Muskettiers must be in the midst, and the Pikes as Flankers.

The Figure of the four Fronted Battle, 104



To Fire upon this Figure, the Muskettiers must do it in Rank, and after Firing, wheel off to the Right, making their passage through the intervals and placing themselves in the Rear of their own Division successively,

maintaining the same Ground, or if you would bring the Musketers to the Angles, and reduce the Pikes to the middle, then must the Musketers take place on the Flanks when you make the Figure.

*To reduce this Figure.*

The whole Body is commanded to Face to the proper Front: And then,

Musketers in the Rear March up on the Left of the Musketers in the Front.

Musketers in the Flank Face inward, and close your Division.

These Commands given, cause the Pikes to march up, taking their places directly after their Leaders, and by that means they will be brought into a solid square: The Commands are,

Musketers Face to the Right and Left inward.

Pikes Face inward interchanging Ground.

The

T

thus

to th

mid

ma

Fla

low

of the left Flank.

of the left Flank.

of the left Flank.

of the left Flank.

of the left Flank.

of the left Flank.

of the left Flank.

of the left Flank.

of the left Flank.

of the left Flank.

of the left Flank.

of the left Flank.

of the left Flank.

of the left Flank.

of the left Flank.

of the left Flank.

of the left Flank.

of the left Flank.

of the left Flank.

of the left Flank.

of the left Flank.

of the left Flank.

*The Hollow Fronted Cross Battle, how to form it.*

**T**HE Files in this case being eight Men in depth, the words of Command are thus to be given,

The two first Ranks wheel your Front into the midst.

Two last Ranks wheel your Rear into the midst.

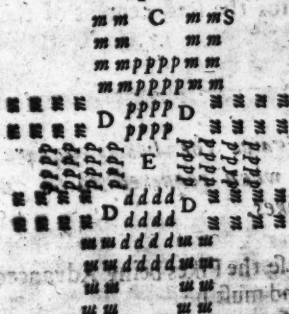
The rest Face to the Right and Left.

March.

Here they must move untill they have made the Cross, then the Musketeers must Flank the Pikes, as for example in the following Figure.

Proper Front.

Front of the left Flank.



Front of the Right Flank.

Front of the Rear.

If you come to Fire in this Figure, it may be done every way as at Front, Rear and Flanks, the Fire made, they must wheel off by Division, and take their Stations in the Rear of their own Division, moving forward into the Leader's Ground, that the form of the Figure may not be altered, and when the second Fire is given, the Pikes must move leisurely up, Porting as they Advance, till they make an even Front with the Musketers, the second Firing being made, those that Fired are to wheel, and place themselves in the Rear of that Division of Pikes which they Flanked, which order, all the Ranks must observe upon Firing, and by the Pikes, Charging and Re-advancing, the Figure will be preserved, and the Reducement may be observed in what is directed for the Reducement of the cross Battel.

---

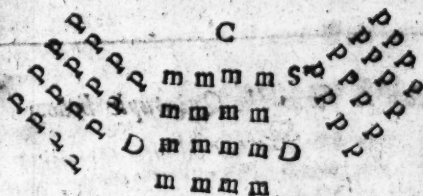
*How to frame the hollow Square with Angles when required to be guarded with Pikes.*

**I**N this case the Pikes being Advanced, the Command must be  
*Pikes close your Divisions before the Musketers.*

Plates face all to the Right.

upon this, they must Advance and move into the space between the Angles of the Muskietiers, by which means the following Figure will be formed, &c.

*Front.*



S

m m m m

m m m m

m m m m

E

m m m m

m m m m

m m m m

m m m m

m m m m

S

m m m m

D m m m m D

m m m m

m m m m

m m m m

m m m m

m m m m

m m m m

m m m m

m m m m

m m m m

In firing upon this Figure, you have your choice to fire either to the Rear, Front, or Flank, as many Ranks as will stand with conveniency, who upon firing must wheel off and keep the ground, or upon firing, they may retire into the Figure and charge for a second firing.

---

*How to form the Quintuple hollow Square, &c*

**I**N forming the following Figure, the Musketers having made Ready, and taken their station in the middle, make the hollow Front cross Battel by wheeling the Front of the two first Ranks into the middle, which done, the Rear of the two last Ranks must be wheeled into the midst likewise, then the rest of the Body must Face to the Right, and the Left and March, till they have formed a Square, whereupon the words of Command are,

*Face to the Front, Rear and Flanks.*

*This done, the Pikes in the Front of the Musketers must be Commanded, viz.*

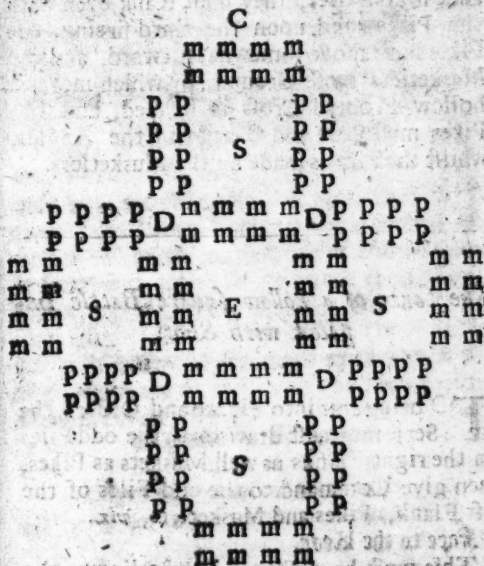
*Open to the Right and Left.*

*Up.*

Upon this, the last Rank of Pikes must be even with the first Rank of Musketeers, and then these words of Command follow, viz.

Two first Ranks of Musketeers of each Division move forward clear of the Pikes.

This done, the following Figure will be produced.



In firing upon this Figure, the Command is,

Musketiars in the midst, close to the Front, Rear, and Flanks.

Fire, &c.

The Musketiars ought upon the first firing to make good their Ground, the second time firing over, they must Rank even with the Pikes, and upon the third firing, the Pikes must move somewhat forward, and the Musketiars loose Ground, by which means a hollow Fronted Cross is formed, and the Pikes must Port and Charge in the Angles, whilst the Fire is made by the Musketiars.

*The form of a hollow square Battle impaled with Shot.*

**T**O bring this into Figure and Order, the Serjeants must draw forth the odd Files on the right Flanks as well Muskets as Pikes, then give Command to the odd Files of the left Flank, Pikes and Musketiars, viz.

Face to the Rear.

This must be observed in wheeling to the left Cross, the Rear following, the Bringers up, then the Command to the rest of the Body is

Close



Close to the Right and Left outward.

This must be till the Rear Angles of each Division be in opposition to each other, then the Command is,

All Face to the Center.

Face all about to the Right.

By this means the following Figure is formed,



Note, In these Figures, that C stands for Commander in Chief, L for Lieutenant, E for

for Ensign, S for Serjeant, and D for Drums, P are Pikes, and M Muskets.

To Fire upon this Figure, when the Ranks of Musketers have presented and fired, they are to wheel off to the right and left through the Intervals, that so they may be made in the middle of each Division, as appears in the Figure, and then they must place themselves in the Rear of their own Division, the next Rank moving into their Ground, or if any urgency require it, the Musketers having fired, they may wheel off and take their station in the Rear of their following Division of Pikes, which Division is to move forward and maintain the Musketers Ground.

If you would reduce the Order, the word of Command to the whole Body is,

Face to the left Angles of the Front Division.

Upon this, they must March and even their Ranks, and straighten their Files, upon which the half Files must double their Ranks to the left forwards, and the first Order will be regained.

D D D D D D D D

D D D D D D D D

M M M M M M M M

M M M M M M M M

*Directions*

*Directions or general Observation in giving Battel.*

**T**Hough there can no certain Rule be ascribed where the Contingencies are various, yet it has been observed by experienced Commanders, that Rules are necessary, wherefore a Commander must avoid engaging against his Will, as much as in him lies, and take the happy moment to charge the Enemy, when he sees an active Liveliness, and sprightly Vigour in his Souldiers, choosing the most advantageous Ground according to the quality and number of his Men, sheltering for fear of being enclosed, one of the Wings or Flanks to a place strong, either by Nature or Art, and bring on the Divisions of Horse and Foot at their ordinary distance, placing the best Regiments of Horse and Foot on the Wings; if the Enemies out front you on the contrary Wing, it is requisite, then the contrary Wing must march leisurely, and give the Charge as soon as ever the Cannon is playing, and if your Division of Horse out-flank the Enemy, then may they wheel and charge them in the Flank at the same time, the rest of the Horse are charging in the Front, and likewise it may be done on both Wings

Wings if they exceed the Enemy, but if your Horse be few in number, the best way is to keep near the Foot, the better to be sheltered if need require by the favour of their Shot, or there is a further security, to draw up on the outermost Flank of the Wing of Horse that is out-flanked, the Rear Guard of Horse of the same Wing; and this must be done with speed, or if it happen that your Divisions of Horse do front the Enemies Foot, when you are out-flanked by their Horse, then ought the Officers to draw off the Division and place them on the outermost Flanks of that Wing which is out-flanked, and in all matters of War Diligence and Expedition is wonderfully available with caution not to let your Councils be discovered to the Enemy, which if you suspect to be done by any Disserter or Prisoner taken, it will be requisite to change them so far as is convenient.

THE



*A Prospect of Grim war you here behold. To show In peace what dreadfull Wars dos teach.  
Sieges and Battles wee In this unfold. By which you may samas highest glory Reach.*

THE  
SECOND PART:

OR THE

Expert Engenier :

Being the

ART of GUNNERT,

AND

Making Fire-Works for WAR and  
other Matters.

Serving as a SUPPLEMENT

To the foregoing TREATISE

**A**S great Ordnance are an essential part  
of War, so it will not be a miss, but  
altogether convenient to give the  
Practitioner in Enginry a prospect of those  
Affairs that must unavoidably concern him;

K

and

each.  
each.

& therefore he that would improve himself in this kind either by Land or Sea, must first be careful in knowing what Materials are requisite, as also to be skilled in Geometry and Arithmattick, the better to know what measures to take on sundry occasions that vary in themselves.

And to this purpose, the Gunner must ever have Rammers, Scoops, Ladles, Sheep-skins with the Wool on, to sponge or clear the Piece; as likewise Canvas or fine Past-board to make Cartridges for the Powder, when the Piece is hot with often discharging, least the Powder being put in lose, it fire of it self, he must have spare Wheels, and Axel-trees, least any should break in the way, and so delay the March of an Army, which frequently happens to its great detrement, shot he must have of such sizes as the Pieces will bear even to the full of the Calliber, least forcibly rattling against it flaw the Piece; he must likewise have case Shot to break the Front of an Enemy, open a Passage, on clear a Deck when borded; likewise hand Spikes, Budg, Barrels, Baskets to carry Shot, Match, well Armed Linstocks, Torches, dark Lanthorns, and Compasses to measure the Piece and Shot, and to prevent breaking the Charge, must be proportioned according to the thinnest Metal of the Piece, and in this case, the Charge being put in with your Scoop; if you are to  
Fire

Fire upon a Line, or under Mettal, you must be sure to clap in a good wad after it, and ram it down, or else the hollownes of the Powder may chance to burst the Piece, not only to the defeating your Design, but to the killing and wounding many Persons near it, which has but too sadly happned by carelesness; and to move or travers your Piece, beside, hand Spikes or Leavers, you must have Crows of Iron, Coins of Wood to lay it above or under Mettal, taking care to know the depth of the Chamber of the Piece, that the Charge may be agreeable, for if the Shot be to light, or too heavy for the Charge, it will never answer your expectation.

Of Artillery, there are several kinds, viz. the Falconet, the Basilick, the Rabinet, the Falcon, the Minnion, the ordinary Minnion, the Sacker, the lowest sort, the ordinary Sacker, the Sacker of the elder make, the lowest Demiculverin, the eldest sort of Demeculverin, the ordinary Demiculverin, Culverin of the best size, ordinary Culverin, Culverin of the largest size, lowest Demicannon, ordinary Demicannon, Demicannon of the great size, Cannon Royal, or whole Cannon, being the biggest of all Ordnance.

According to the bigness and weights of the several Pieces, they must be charged both with Powder and Shot, and if we suppose a Piece to be in length eight Foot, and that this Piece



weighs 1500 Pounds, having four Inches Diameter in the Bore, and you would know how much it requires, take notice that it requires four pound of Powder to carry a Shot of sixteen Pound 160 paces at five large Feet to the pace, and do Execution, unless the Piece be defective, by reason of Flaws or Honicombs within, and to try the first of these as soon as ever the Piece is discharged, stop the Muzzle of it, and the Touch-hole, and if there be any Flaws that come through, you will perceive the Smoak work through them, this is to be known likewise by an Iron Hand-spike, which will cause the Piece to jar, if the Flaws are considerable.

The Honicombs are certain spunginess or defects of the Mettal in casting, which may be perceived by reflecting the Light of a Looking-Glass held against the Sun into the Mouth of the Piece, or putting in a peice of Candle on a long Cleft-stick.

*The*

*The Terms of describing a Piece and  
Shot, &c.*

**T**HE outward Ring of the Breech is called the Cascabel Deck, that Ring next the Touch-hole is called the Base Ring, and that place between the Touch-hole & the next Ring, is called her Chamber or Charging Cillinder, the next Ring is the Ramforce Ring, the third the Tronion or Ballance Ring, and that next the Muzzle is called the Cornice Ring, and the uttermost Extremity is the Muzzle, the hollow is called the Caliber, the top the Superficies, and the whole length the Chase, so that he that will be a Gunner, must have these distinctions at his Fingers ends as ready as a Sailer has the points of the Compass.

As for the Shot used, it is generally Iron, but sometimes Lead, and for want of these Stone, and these must be considered according to their weight and bigness, for there is a disproportion, if we consider the equality of their Weight, and this not being well observed, may be of great hindrance in hasty Exterprizes, and the proportions are these.

Between Lead and Iron six to nine, by which it is observed, that a Shot of six Pounds Iron, is as big as nine Pounds Lead, and the

proportion between Iron and Stone is three to eight, so that there is eighty to thirty, for a Shot of Stone of thirty Pound is proportionable in bigness to an Iron Shot of eighty Pounds; and in this manner you may guess of any kind.

---

*How to make Cartridges, &c.*

**I**N case a Piece is very hot by Exercise, and will not endure the Powder, then a Cartridge is necessary to make them; you must have a Rowler of Wood to the bigness of your Piece, on which you must role Past-board or Paper, pasting it as you role, that it may lie firm and smooth, then having dried the cases, fill them with Powder, and choak them at both ends with a small Cord, or you may stop the ends with Flax, and put it into your Piece, forcing it with the Rammer into the charging Celinder, then with a sharp Iron bore it at the Touch-hole and Prime.

If you would shoot red hot Bullets as many times, it is done at Sieges to fire Houses, you must when you have rammed down your Cartridge, force a green Turf upon it, and then sling in the Shot, this way has been common, especial-

especially at Sea, but since Bombs, Hand-Grana-  
des, Stink-pots, &c. have been in use; it  
is not often practised.

---

*Observations in Ballancing a Piece.*

**Y**OU must ever observe in Marching,  
that the Carriages are proportioned to  
the Piece, to prevent overthrowing, or break-  
ing, so that to set them true, one and a half  
of the length of the Cellinder or Chamber  
should be the length of the Carriage-Stock,  
and the depth of four Diameters of the Con-  
cave of the Bore in the middle, but at that  
part next the ground, about the proportion  
of the Diameter of the Shot will suffice;  
as for the Wheels they must be strong, and  
their height for Land-Service about half the  
length of the Piece, but on Shipboard lower  
Carriages are in use, the Turneons or bear-  
ers of the Piece must be laid on equal heights  
upon the turning Irons of the Stock, that  
the Piece may stand true mounted, least  
swerving to any side the Shot become Ran-  
dom, and in this case two thirds of the  
Piece must appear above their Centre, ha-  
ving Cordage ever ready to move or turn  
K 4 them,

them, especially for braces at Sea, for many times a Ship is over-set and in danger to be lost by their breaking loose through the defect of Tackle.

---

*Further Instructions necessary to be known.*

**E**Ver observe that your Budg-Barrel, Leather Bag, or Cartridges of Powder lie on the windy side of you, least a spark flying from your Match blow it up, and after a Discharge having cleansed the Concave with your Sheeps-Skin, Furbisher, fill your Ladle, but not so full as to scatter any, and having Charged it as home into the Piete as you can, give it a sudden turn with your Thumb and Finger, keeping your Body for your own safety clear of the Muzzle, and so quickly drawing it out, clap in your Wad, and force it down, that the Powder may not lie hollow in the Chamber, then put the Shot in and wad it down, having the Touch-hole all this while covered, least any spark should fall in, then having a Linstock well armed with a good Match and Coale, prime with small Powder, drawing a Train from the Touch-hole, and fire one end of it, for

if

if you should hold your Match upon the Touch-hole, the force of the Powder would blow it away.

---

*Directions for Shooting at Random, or at a Mark.*

**I**F your business lies to shoot at Random, or at a Mark, then you are to consider the Random of a Piece is its entire distance from the place where you discharge, to the place where the Bullet first lights or grazes on a level Line, called a Horizontal plain, and to gain the true knowledge of this, the ground must be level where it is put in practice, so that the level of the shot may not be hindered, and having taken notice of the distance of ground from the Piece to the fall of the Bullet, mount the Muzzle a degree higher, observing again the same notice, by which through many degrees you will be capable of knowing, upon the level or Ascendant, how many paces the Piece will carry with more or less Powder, which may be raised even to a tenth degree, or as high as the Piece can be mounted, so these distances well understood, the Gunner may know how to direct his Piece  
either

either at a Bastion, Castle-Wall, Curtain, Ravelin Counterscarp against the Batteries of Besiegers, or into their Trenches, or he may batter the Ranks of an Army at a great distance, and many other things incident to true Rules of Firing even to the striking a Ship under Sail, but in firing at any thing in Motion, you must consider the swiftness of it, and Fire in your aim a distance before, and so the Bullet by that it moves that space will be there, for although a Bullet is carried with great impetuosity, yet all Motions require time more or less.

If you would strike down a Light in the Stern of a Ship, or in a Castle if it be in the Night time, you must stick directly on the top of the Muzzle of your Piece, either a peice of Wax-Candle lighted, or a fired Match, by which means you will bring that and the other Light together, so as to take a fair Mark, and to know whether they are brought together, stick up a Nail with a peice of Wax or Clay on the breach of the Piece, and bring that and the other two to bear with each other.

*How*

*How to take out a Shot that sticks in a Piece, and cool her to make her recover her Force.*

**I**T many times happens through too much hastiness, or that a Shot is mistaken, or that the Powder, for want of being rammed down, makes it stick half way, so that it is dangerous to discharge it, without breaking the Piece; in this Case let it descend, lowering its Muzzle, and then having dissolved Bay Salt, or other Salt, in some Vinegar put it into the Touch-hole with a Funnel, and it will dissolve the Powder; then strike on the Piece with a Hand-spike where the Bullet lyes, and it will rowl out, having before given it a thrust or two with the Rammer to loosen it.

It is taken notice on by all Gunners that the oftner a Piece is discharged, it by growing hot, looses more, and of it's force, and will not carry the third or fourth time so far as it will the first or second, every time abating somewhat, so that you must cool it, which is much the better done with Vinegar; for that not only carries off the heat, but by the sharpness of it's Quality recovers the lost force.

*Wha*



*What Powder is made on, and how to try  
its Goodness.*

**P**owder, a fatal instrument of Death, and almost of incredible Force, was first found by one *Bartholdus Swart* a Monk, by a spark of Fire accidentally falling amongst some of his Chymical Preparations, but since as to its Force, has been much improved, it is made of the Quintessence of Salt-peter, Brimstone, and Coal Dust, by grinding and other means, however in long lying after it is made, it will loose much of its Force, the strength of the of the Salt-Peter, tending downwards, and that of the other matters upwards, and the first thing to know whether it be good or not, is to handle it, and observe whether it be well dried and corned, this being noted, lay a few Corns scattering upon a sheet of white Paper, and set Fire to them, when if so it happens, there is a black Mark, or singe with a noisom smell left behind, then the Powder is not good, but if there be little or no Mark, or a clear blewish Mark, then conclude it fit for Service, but noughty Powder may be made up again, and strengthened with Salt-Peter.

*How*

*How to Charge a Mine, blow up a House,  
to prevent the Progress of Fire, or a  
Ship that is Sunk.*

1. **M**ines are various, some already advantageous by Vaults, others must be carried on under Ground, great difficulties being met withal, as Rock or Springs of Water, however the Mine being made, if there be any considerable quantity of Water, the Mines for driness of the Powder ought to be Charged with Barrels of Powder, whereas those that are drier may be Charged with Bags or Sacks, the Train may be laid by Match, and six Inches of good Match will burn an hour, but if it be for quick Execution, a Train may be laid into some Trench through Cain Troughs or upon Boards, and great Care must be taken that it be so Charged, that it refund not, or burst out upon those that spring it.

2. To take a House directly up, that it shall fall directly, as we may say in the place where it stood, though shattered to pieces, place the Powder, if there be any Cellers directly under the main Beam, lay a Train upon Boards from the Bung-hole of the Barrel, covering it to prevent Sparks falling in the  
Train

Train, and place at the head of the Train a peice of Wild-fire, when having given notice by beat of Drum, set Fire to that with your lighted Match at the end of a Linstock, and retire to a coverture for fear of any scattering Tiles or Timber, if you would throw it sideways from the Fire, you must place the Powder near the contrary side under the most substantial Beam, and it will cast it as you wish, so that the Timber may be drawn away without danger.

Many times it happens that a Ship sinks in a River or Channel, and is not worth weighing, yet obstructs the passage, especially at low Water, here you must send down a Diver to find the entrence in the hold of the Ship. and that found, fix a Leather Pipe with Pitch or Rosin into the Bung of the Barrel of Powder, that the end of the Pipe may be above Water when the Barrel is in the Hold which must be sunk and guided down by Cords, then the top of the Pipe floating by help of Bladders, the Boat that waits must with a long pair of Tongues put a hot Iron Bolt down it, and make of as fast as may be, else the Powder taking Fire, the Wreck will float and endanger the over-setting it, or this may be done with a long hollow Fishing Cane.

**Fire-**

*Fire-works for War, used on sundry occasions, the manner of making and using them.*

**M**ost Fire-works used in Sieges are of late thrown out of Mortars, the best Mortars being made of Brass or Copper, though sometimes they have been made of Past-board and Wood.

If the Bore of a Mortar happen to be ten Inches in Diamiter, it ought to be a Foot and nine Inches in length, and the Chamber three Inches and a half in Diamiter, and in depth five Inches, the Mettal above the Port, Fire, to be three Inches and a half in thickness, and so lessening to two Inches; as for the planting these Mortars, the ways are not difficult, for they are mostly played Mounting, yet the Engenieer ought to be well skilled to direct a Granado Shell to any particular place, for upon his delivering it, he ought to know justly where it will fall; likewise his Fuzes must be so exactly made, that they will not break till they are in the place designed for Execution.

*How*

*How to make, or Order a Granado.*

**A** Granado is first properly called, so in relation to its Shell, for the Shell to contain the matter are cast with hollow cavities, and a small vent frequently of Iron, but some times Brass, Copper, Glass, and Earth, these, if designed to blow up, or beat down, are usually filled with dry Powder, and an Iron hollowed or Pistol Barrel rammed with Wild-fire made of Brimstone Flower, Dust of Powder, Salt-peter, and Oyl of Petrolum drove into the Vent of the filled Shell to an Inch, when the Mortar being Charged, the Granado must be slung in with Ropes put in the Hooks of the Shell if it be very great, then having taken your Aim, you must a minute before you give Fire, Fire the Fuze, then by Fireing the Mortar, send it away to the place designed; and of such deadly force is this Engine of Mischiefe, that falling upon a Castle, Church, or House, it breaks through to the lowermost Flore, beating down all before it, and then blows up and rends in a terrible manner, the Shell breaking in a thousand peices.